CA3 ONHW W 20 88 F 11

URBAN/MUNICIPAL

HEALTH STATUS FACT BOOK

- social and biological indicators -



Fact Book on the Health Status

of Hamilton-Wentworth Residents

Prepared for

The Health Priorities Analysis Unit, Faculty of Health Sciences, McMaster University;

The Hamilton-Wentworth District Health Council;

The Department of Health Services of the Regional Municipality of Hamilton-Wentworth

by

Blake D. Poland Larry W. Chambers Anne F. Kennedy



ACKNOWLEDGEMENTS

Many people have contributed material, comments and support to this Fact Book. The Fact Book would not have been possible without the patience and good humor of its many contributors, who cheerfully bore the brunt of our many questions and special Special thanks are in order to Dr. R.J. Pickering (Interim Director, HPAU) for his supportive guidance, and to Laura Pickard (Department of Health Services) for her contribution to this and the previous Fact Book. Gail MacKean (District Health Council) has been particularly helpful and always willing to help locate information at a moment's notice. Our lifeline with the Ministry of Health, Peter Finkle, has been a delight to work with. Special thanks are also due to Sabrina Gaon (our summer student with the HPAU) who put many patient hours into the nth revisions of several tables, and to Candace Sharma for the efficient and warm working environment.

Contributors to this second edition of the Fact Book, in addition to those mentioned above, have included Lily Eastridge (Ministry of Health), Drs. Barry Humphrey and Gary Miller (Hamilton Psychiatric Hospital), Drs. Macdonald and Stephenson (Henderson Hospital), the Ethnoculture Database (Ministry of Citizenship and Culture), Gloria DeSantis (Social Planning and Research Council of Hamilton and District), Terry Finch (Association of Agencies for Treatment and Development), Elsie German (District Health Council, Services for Seniors Study), Lorna Browne (Assistant Medical Officer of Health, Department of Health Services), Lou Lanza (Regional Municipality of Hamilton-Wentworth, Planning Department), Fab Angelesi (City of Hamilton, Planning Department), Dr. Ron McAuley (McMaster, Family Medicine), Jane Underwood (Director of Nursing, Department of Health Services), Lee Liaw (McMaster, Geography), Jane Worral (Hamilton-Wentworth Home Care Program), Arlene Stacie and Myrna Pond (Department of Health Services), Brian Malone (City of Hamilton Traffic Department), Wing Chan (Worker's Compensation Board, Statistical Services), and Mike DeVillaers (Addiction Research Foundation).



TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENTS	(ii)
TABLE OF CONTENTS	(iii)
LIST OF TABLES AND FIGURES	(iv)
CHAPTER	
1. INTRODUCTION 1.1 Preface 1.2 Objectives 1.3 Organization of the Fact Book 1.4 How to use the Fact Book 1.5 What the Fact Book does not do 1.6 The Health Priorities Analysis Unit	1 2 2 3 4 5
2. SOCIO-DEMOGRAPHIC & BACKGROUND INFORMATION 2.1 Geography 2.2 Demographics 2.3 Socio-economics 2.4 Health care system and infrastructure	8 9 18 31 34
3. GENERAL HEALTH STATUS 3.1 Mortality 3.2 Morbidity (health care service use)	39 40 51
4. PREVENTIVE PRIMARY HEALTH CARE 4.1 Sexually transmitted diseases 4.2 Live births 4.3 Perinatal mortality	64 65 66 67
5. COMMUNITY HEALTH PROTECTION 5.1 Immunization 5.2 Dental health 5.3 Road trauma 5.4 Occupational injury	70 71 73 74 76
6. PERSONAL & SOCIAL DEVELOPMENT 6.1 Mental health 6.2 Lifestyle 6.3 Substance abuse	78 79 81 82
APPENDIX I Cautions in interpreting data APPENDIX II Additional and forthcoming resources APPENDIX III The Health Priorities Analysis Unit APPENDIX IV Fact Book user questionnaire	83 86 90 99

LIST OF TABLES AND FIGURES

EXHI	BIT	PAGE
II.	SOCIO-DEMOGRAPHIC AND BACKGROUND INFORMATION	8
Geog	raphy	
2.1	McMaster Health Care Region and District Health Councils	9
2.2	Hamilton-Wentworth Census Metropolitan Area	10
2.3	Census tracts and sub-divisions, Hamilton-Wentworth	11,12
2.4	Neighbourhood name and number reference, City of Hamilton	13
2.5	Planning units, City of Hamilton	14
2.6	Town of Stoney Creek, neighbourhoods and planning divisions	15
2.7	Town of Dundas, planning unit codes	16
2.8	Hamilton postal code zones	17
Demo	graphics	
2.9	1986 Census demographic information for Hamilton-Wentworth, by municipality	18-20
2.10	Age-sex pyramid for Hamilton census metropolitan area, 1986 Census of Canada	21
2.11	City of Hamilton population 0-5 (1986)	22
2.12	The elderly in Hamilton-Wentworth: demographics	23
2.13	Population 65 years and over	24
2.14	Region of Hamilton-Wentworth assessed population, by area municipality	25
2.15	Population and population shares Hamilton-Wentworth and area municipalities, 1971-1986	26
2.16	Average annual growth rates Hamilton-Wentworth and area municipalities	26

EXHIBIT		PAGE
2.17	Share of regional population growth from 1982 to 1985	27
2.18	1986 Census population (Hamilton-Wentworth) by selected mother tongue, gender and census subdivision (municipality)	28-30
2.19	Ontario school populations as of September 1986	30
Socio-e	economic indicators	
2.20	Social services use	31
2.21	Police disturbance	31
2.22	Population density	32
2.23	Household income	32
2.24	Single parent families	32
2.25	Incidence of low income, 1980	33
Health	care system and infrastructure	
2.26	Selected health care personnel, south and central Ontario, 1984	34
2.27	Bed capacity for the elderly in Hamilton-Wentworth, 1987	35
2.28	Hamilton-Wentworth district hospital bed allocations-1987	36
2.29	Institutional accommodation, south & central Ontario, 1984	37
2.30	Health care costs, 1985	38

EXHIBIT	PAGE
III. GENERAL HEALTH STATUS	
Mortality	
3.1 A note on the appropriate use of morbidity and mortality statistics	40,41
A note concerning Ontario Ministry of Health classification of morbidities	42
The 15 leading & leading supplementary causes of death in Ontario by frequency of occurence: 1986	43
The 15 leading & leading supplementary causes of death in Ontario by potential years of life lost: 1986	4.4
Leading supplementary causes of death in Ontario in 1986 (mortality rates)	45
3.6 Directly standardized annual death rates: males 0-69, 1980-82	4 6
3.7 Directly standardized annual death rates: females 0-69, 1980-82	47
3.8 Mortality by age group and cause for Hamilton-Wentworth males, 1986	48
3.9 Mortality by age group and cause for Hamilton-Wentworth females, 1986	49
3.10 Mortality by age group and cause for Hamilton-Wentworth (total), 1986	50
Morbidity	
3.11 Morbidity by age group and diagnostic category for Hamilton-Wentworth males, 1986	51,52
Morbidity by age group and diagnostic category for Hamilton-Wentworth females, 1986	53,54
3.13 Morbidity by age group and diagnostic category for Hamilton-Wentworth (total), 1986	55,56
Acute care separations by municipality, age group and gender (all diagnostic chapters), 1986-1987	57
3.15 Ontario Home Care Program: number of admissions,	58

EXHIBIT	C C C C C C C C C C C C C C C C C C C	PAGE
3.16	Ontario Home Care Program: admissions by primary diagnostic category, April 1987 - March 1988, Hamilton-Wentworth	59
3.17	Henderson health service organization: age-sex distribution total enrolment, July 1987	60
3.18	Henderson health service organization: 20 most common diagnoses by number of patients (1987)	61
3.19	Henderson health service organization: 20 most common diagnoses by number of encounters (1987)	61
3.20	New cancer cases registered by site of disease and treatment centre, 1986	62
IV. P	REVENTIVE PRIMARY HEALTH CARE	63
Sexual:	ly transmitted diseases	
4.1	Sexually transmitted diseases: positive test results for 1987, Hamilton-Wentworth	64
Live b	<u>irths</u>	
4.2	Live births, Wentworth county, 1986	65
Abortio	ons, stillbirths & infant deaths	
4.3	Infant mortality from selected causes, Ontario, 1984	66
4.4	Stillbirths in Hamilton-Wentworth, 1987	. 67
4.5	Infant deaths by age and gender, Hamilton-Wentworth, 1986	67
4.6	Therapeutic abortions: age by marital status, Hamilton-Wentworth, 1987	67
4.7	Therapeutic abortions: gestation period by age, Hamilton-Wentworth, 1987	68

EXHIBIT	PAGE
V. COMMUNITY HEALTH PROTECTION	69
Immunization	
5.1 Hamilton-Wentworth school immunization status summary 1987-1988	70-72
Dental health	
5.2 Average dental decay, missing and filled teeth per individual in Hamilton-Wentworth and Ontario, ages 5-13, 1982 and 1985	72
Road trauma	
5.3 Time of day versus traffic volume	73
5.4 Time of day versus collision rate	73
5.5 Pedestrian involvement in vehicular collisions	74
5.6 Collisions by municipality	74
5.7 Injury status by category	74
Occupational injury	
Worker's Compensation Board of Ontario compensation claims initially settled in 1987: number of fatal & non-fatal claims and working days lost by occupation for all industries, Hamilton	75,76
VI. PERSONAL AND SOCIAL DEVELOPMENT	77
Mental health	
6.1 Admissions to psychiatric units by age group, hospital, and gender, Hamilton-Wentworth Region, April 1986 - March 1987	78
6.2 Hamilton Psychiatric Hospital: discharges by diagnosis	79
Lifestyle	
Percentage of Ontario residents practising positive and negative health behaviours, 1985	e 80
Substance abuse	
6.4 Types of problem substances and agency	81

Introduction

Chapter 1

1.1 PREFACE

Finagle's Laws state that:

- (1) The information you have is not what you want.
- (2) The information you want is not what you need.
- (3) The information you need is not what you can obtain.
- (4) The information you can get costs more than you want to pay

This second edition of the Fact Book represents our second attempt to break these laws for health status information in the Hamilton-Wentworth Region. The Fact Book was compiled for health professionals and others in the Region who are responsible for setting priorities for planning health care promotion and education activities. As Tugwell and his colleagues (1985) point out in their article "The Measurement Iterative Loop: Framework for the Critical Appraisal of Need, Benefits and Costs of Health Interventions", the measurement iterative loop in its logical progression begins with quantifying the burden of illness, the topic of this Fact Book. This Fact Book does not specifically address the subsequent steps in the loop: identifying likely causes of illness, validating interventions that prevent or ameliorate it, and evaluating their efficiency. However, this and future editions of the Fact Book could also be used in the final steps of the loop, that is to monitor the application of these health interventions.

1.2 OBJECTIVES OF THE FACT BOOK

The objectives of the Fact Book are:

- (1) to provide educators, health planners and service providers in Hamilton-Wentworth easy access to updated health status information that is routinely collected by health providers and others both in the Region (for example, hospitals) and outside the Region (for example, The Ministry of Health of Ontario).
- (2) to facilitate the communication of reports and study results on health status and health promotion in Hamilton-Wentworth.
- (3) to provide an overview of some of the available health status information and to enable the reader to track down the original source before drawing conclusions.

Truly accessible data is information that is used. For this it must be not only available, but also user friendly. In the inevitable tradeoff between time constraints and user friendly (graphic) interpretations of the raw data, it has been expedient to present the data much as it appeared in the original source.

Yet, although basically a compilation of tables and figures from other reports and data sets, the Fact Book does contain a number of tables and graphs that have been synthesized from the original material. Occasionally, we have offered a few editorial comments regarding the interpretation or reliability of the information provided. It is anticipated that future editions of the Fact Book will place greater emphasis on the interpretation of available information and on the establishment of priority issues based on available data.

The data included in the Fact Book were obtained over a three year period through contacts with representatives in a number of agencies. Each table and figure lists the data source. The Fact Book does not always disaggregate the data beyond the Regional level into, for example, municipalities or neighbourhoods. However, further disaggregation, for example, by neighbourhood or income status, is in some instances available from the sources referenced throughout the Fact Book.

The Fact Book was heavily dependent upon hospital based routinely collected health data. Future editions of the Fact Book will devote greater attention to data from other sectors of the health system.

We encourage readers (users) of the Fact Book to submit their comments on the data presented and to submit additional reports and study results that they feel should be included in the next edition. Our plan is to publish this book when the accumulation of important new data justifies this.

1.3 ORGANIZATION OF THE FACT BOOK

In this (second) edition of the Fact Book, material has been organized into a number of sections, in keeping with the format employed by Larry Chambers for Health Profiles of the Citizens of Ontario (published by the Canadian Public Health Association in Reference material on administrative boundaries, health care infrastructure, and demographic and socio-economic data follow the introduction. This material is to assist in the interpretation of the health-related data that follow. section on general health status of the citizens of Hamilton-Wentworth includes both mortality and morbidity (health service utilization, including cancer cases). In the section on Primary Health Care, local data on sexually Preventive transmitted diseases, live births and perinatal mortality are The Community Health Protection section covers immunization status, dental health, road trauma and occupational injury; while the Personal and Social Development section includes material on the frequency and types of mental health problems, lifestyle/health behaviour and substance abuse.

1.4 HOW TO USE THE FACT BOOK

The Fact Book attempts to provide global information about health status or the burden of illness in Hamilton-Wentworth. In other words, the Fact Book does what epidemiologists are trained not to do: to compile data banks. That is health status and burden of illness data should only be collected and compiled if they will address researchable or knowable questions.

In order to protect you the reader from falling into the data bank trap in using this Fact Book, we recommend you ask yourself the following questions when consulting the Fact Book:

(1) Is the attribute selected a relevant measurement?

For example, the use of mortality rates as an indicator of burden due to arthritis and musculo-skeletal problems tells us nothing about the magnitude of the associated pain and disability. Even when mortality is relevant it may give an incomplete picture. For example, for hypertension, burden includes distress and disability due to cardiac failure and stroke.

(2) Are the measurement methods accurate?

Measurement of the health attribute or health status indicator must be accurate. Cause of death is often inaccurate and most components of morbidity require specially designed surveys. Caution should be exercised when surrogate measures such as utilization or supply are used as indicators of burden because they have been shown to be at variance with good survey data in some situations. Where good evidence is not available, multiple sources of data should be checked (See Chambers et.al. 1983).

(3) Are the results straightforward to interpret and apply?

Summary statistics without sophisticated mathematical transformations or statistics for indicators such as mortality rates, the proportion suffering a specific disability, or mean blood pressure (with ranges or confidence limits as appropriate), are usually sufficient. In understanding the burden of illness at the Regional level, the actual number with the health problem is often the most important statistic, rather than proportions or rates. Proportions and rates, including those adjusted for age, sex and income, are important when comparing neighbourhoods or for comparisons of Hamilton-Wentworth with other regions.

Further cautions in interpreting the data provided in the Fact Book are listed in Appendix I. The advantages and disadvanages of mortality/morbidity data, of utilization/rates-under-treatment data and of social indicators are listed (Chambers et.al. 1983)

1.5 WHAT THE FACT BOOK DOES NOT DO

Data From Other Jurisdictions: In compiling this Fact Book, we have refrained from including data from jurisdictions other than the Hamilton-Wentworth Region except for purposes of comparison. Regional and provincial data have been provided in some cases to provide context for Hamilton-Wentworth values. However, comparisons should be made with caution, as socio-demographic and other characteristics typically vary from one geographic unit to the next, and may confound apparent differences in health status (as measured). Secondary data analyses, however, can and should be used to provide further information of the health status and burden of illness of Hamilton-Wentworth citizens. Agestandardized ratios are to be preferred in comparing the municipality to provincial averages. A note on the interpretation of standardized mortality (and morbidity) ratios is to be found at the beginning of Chapter 3.

Quality of Fact Book Data: In compiling the data for this Fact Book, we have relied on bona fide sources. However, we urge the user not to stop here. If these data are to be used for decision making, we urge you to satisfy yourself about the quality of the data reported here by contacting the persons we have indicated who can provide further information about these data. Appendix 1 is provided to assist you to evaluate the quality of these data.

Why the Phrase "High Risk" is Misleading: Health providers have overused the phrase "high risk". Often data such as those presented here are used to identify "High Risk" populations. The phrase "high risk", however, can refer to at least three concepts: avoidable versus unavoidable illness; community burden versus individual burden; and, point of view.

Firstly, unavoidable burden of illness comprises disability, symptoms and mortality for which no efficacious prevention or cure currently exists (such as AIDS and Alzheimer's disease). Resource allocation in these cases should focus on research into etiology, prevention and cure, and not just on care of current victims. The avoidable burden of illness comprises disability, symptoms and mortality for which efficacious prevention or therapy currently exists (such as the prevention of rubella by immunization and prevention of lung cancer by smoking cessation). Resource allocation here should focus on the provision of health care of proven efficacy or on research into community effectiveness and efficiency of a known efficacious intervention.

Second, the distinction between community and individual burden of illness is an important one. For example, the majority of members of a community may have a "mild" illness such as influenza that results in perhaps a two-week interruption in one's daily routine. The total community impact or burden of illness is quite large when the total number of lost working days is calculated. On the other hand, the individual burden of an illness may be devastating but only affect a few members of the community, such as is the case with AIDS.

Third, definitions of "high risk" are influenced by one's point of view. The need for a health intervention is usually determined by a health planner or provider of care. Consumers of health care (patients) may or may not desire such interventions. For example, a person who is 90 and has lung cancer may not want certain kinds of health care.

Therefore we urge that the Fact Book be used for quantifying some avoidable need in Hamilton-Wentworth, for estimating the burden of certain illnesses on the community as a whole, and for use in estimating the need for interventions by health planners and providers.

1.6 THE HEALTH PRIORITIES ANALYSIS UNIT (HPAU)

The HPAU is a health information unit in the Educational Centre for Aging and Health (McMaster University) which is actively establishing working relationships with information sources in the Community, the University and Regional Government. Its role is to foster and promote advances in education and research in health and health care by encouraging the development of systems for improving access to and use of reliable information concerning health needs and trends in the community.

Making key health information accessible to those who will find it useful (education, planning etc) is integral to the mandate of the HPAU. The Fact Book on the Health Status of Hamilton-Wentworth Residents represents a crucial first step in this process. As previously stated, it is our intention that the Fact Book be expanded over time to be not only more comprehensive in its coverage of local health information, but also to do so with greater depth of analysis and critical appraisal. In this manner, the process of determining and prioritizing community health needs can be undertaken.

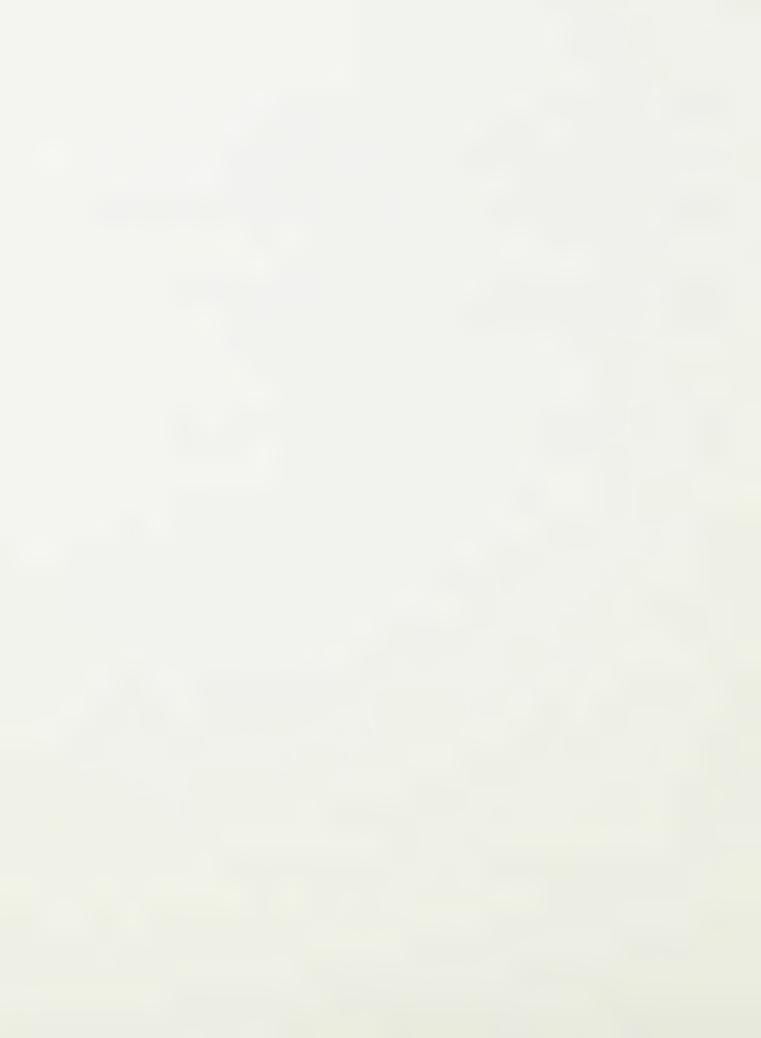
Additional information regarding the mandate, organization and activities of the HPAU is contained in Appendix III.

REFERENCES

Chambers LW 1987. <u>Health Profiles of the Citizens of Ontario</u>. Ottawa: The Canadian Public Health Association.

Chambers LW, Woodward C. 1983. <u>Guide to Health Needs</u>
Assessment: A Critique of Available Sources of Health and Health
<u>Care Information (revised edition)</u>. Ottawa: The Canadian Public Health Association.

Tugwell P, Bennett KJ, Sackett DL, Haynes BN. 1985. The measurement iterative loop: a framework for the critical appraisal of need, benefits and costs of health interventions. Journal of Chronic Disease. 38(4):339-351.

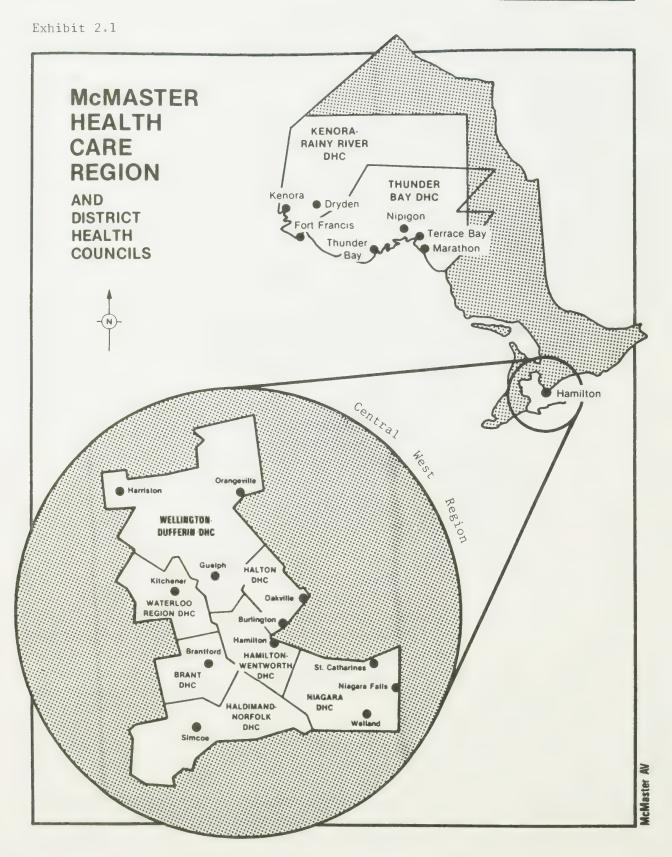


Socio-demographic

and background information

- geography - demographics - socio-economics - health care system and infrastructure

Chapter 2



Source: Learning Resources, McMaster University Faculty of Health Sciences, <u>Health Science Briefs</u>.

Volume I: Overview, 1987.

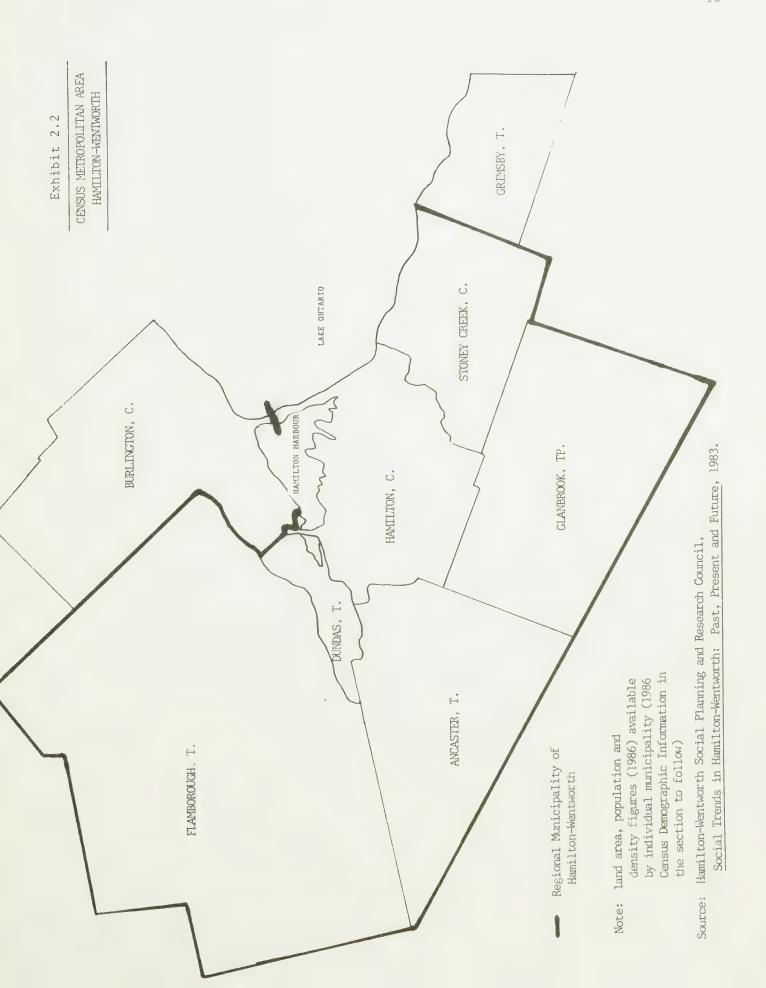


Exhibit 2.3 CENSUS TRACTS AND SUBDIVISIONS, HAMILTON-WENTWORTH

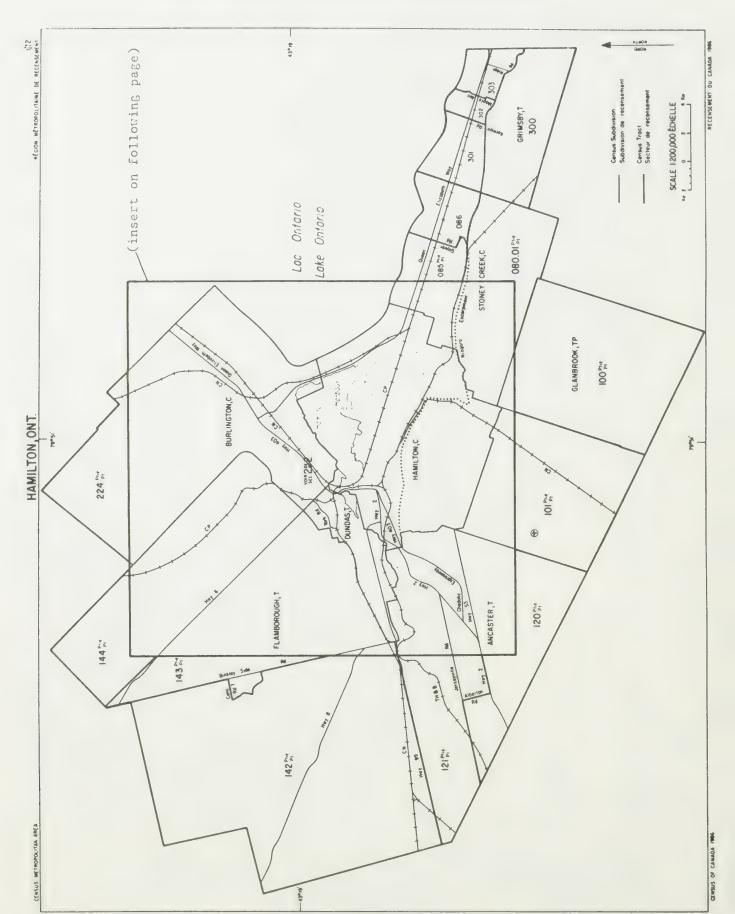
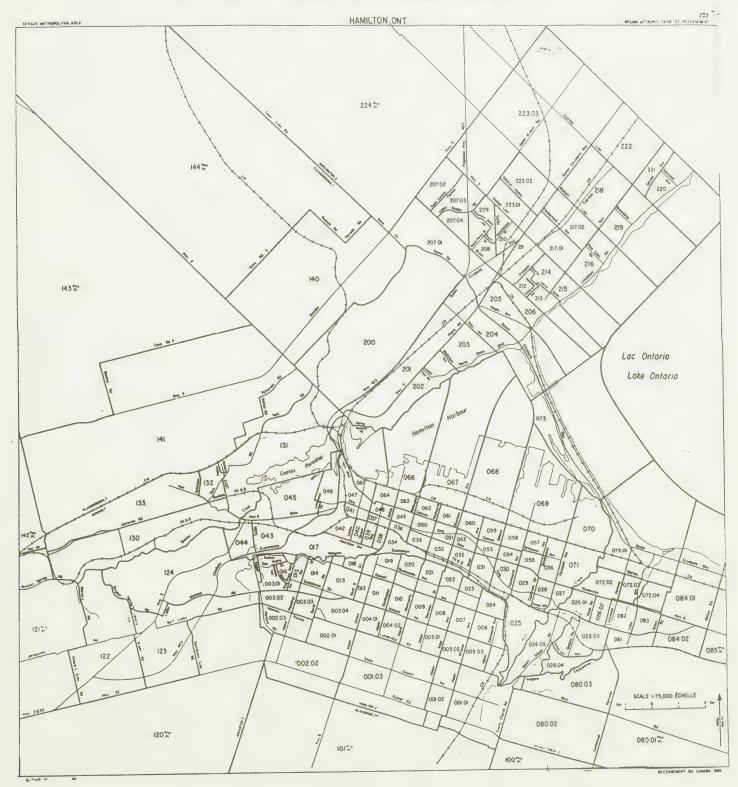
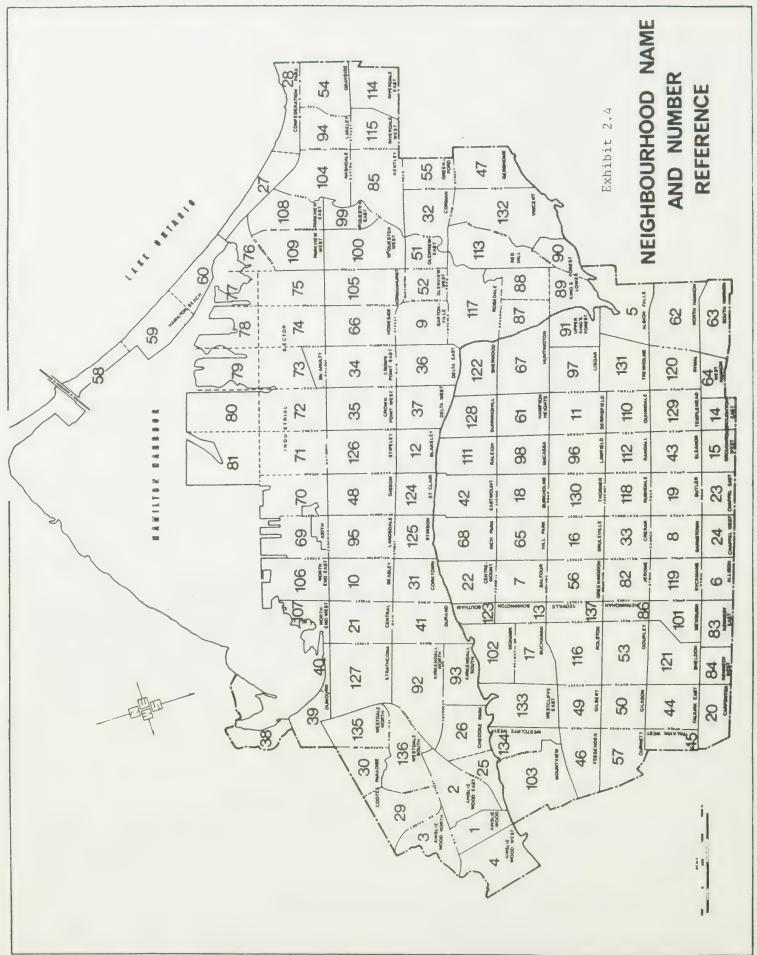


Exhibit 2.3 continued

CENSUS TRACTS AND SUBDIVISIONS, HAMILTON-WENTWORTHS



[&]quot; Insert from previous page.



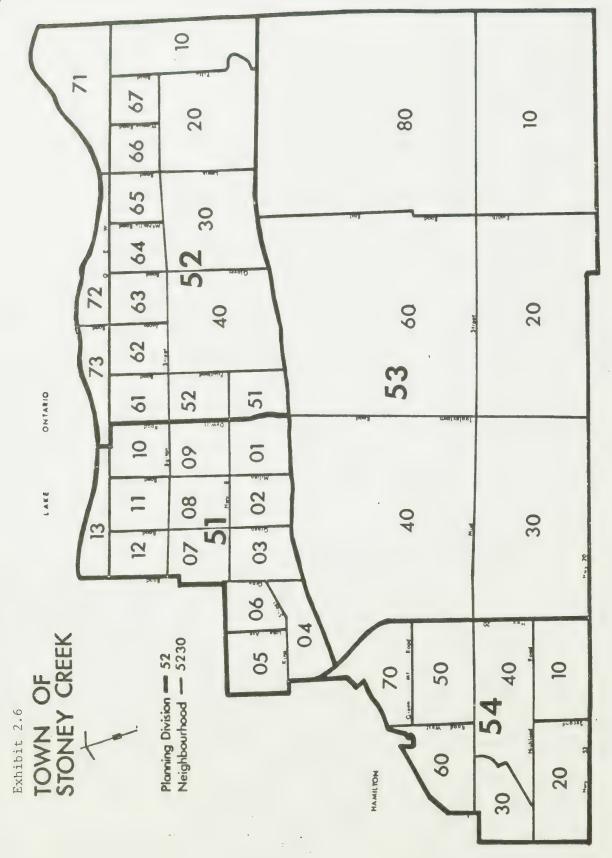
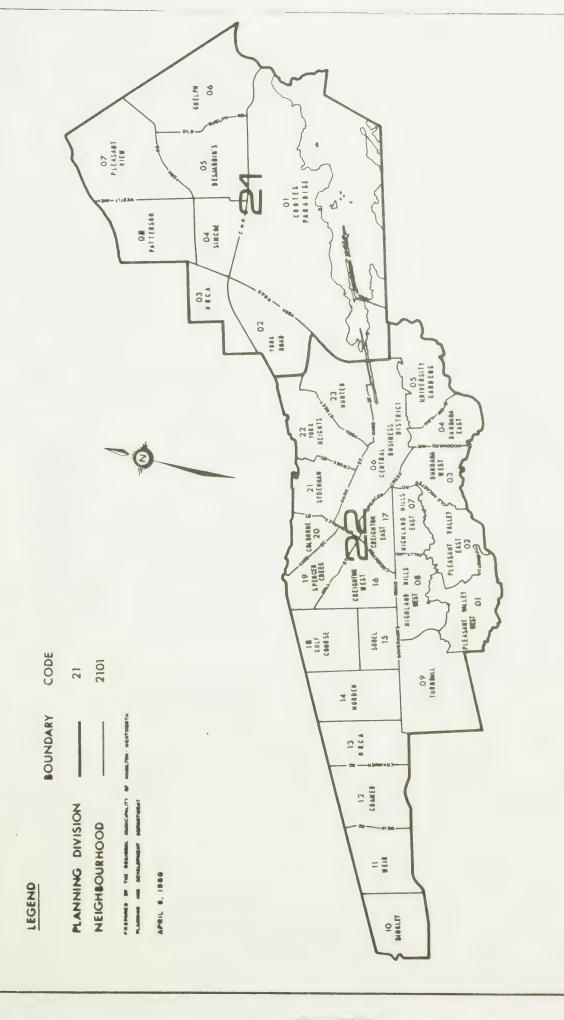
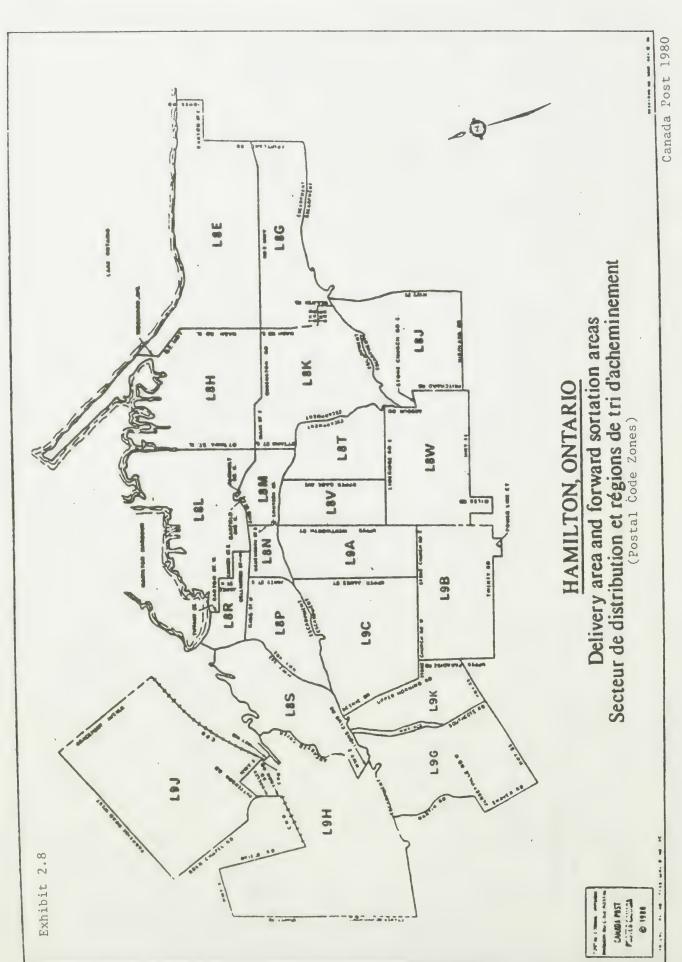


Exhibit 2.7

PLANNING UNIT CODES TOWN OF DUNDAS







Character istics	Mass I toon	Ancaster.	* * *	<u>ي</u>	Dundes	flamborough, I	Glanbrook. TP	Grimsby. T	Hamelton. C	Stoney Creek.
	CMA/RMR		-	+						
POPULATION/LAND AREA										
Population, 1981(1). Population 1986. Population percentage change, 1981-1986. Lend area in square kilometres, 1986.	542,095 557,029 2.6% 1.358,50		14,428 17,264 19,7% 174,57	14.853 16.675 1.62	19.586 20.118 2 7 Z 24.42	24,470 26,142 6.8% 489,90	9 765 9.592 -1 8% 202 74	15.797 16.956 7.3% 58.12	306, 434 306, 728 0, 1%	36,762 43,554 18,53 98,65
Population density per square kilosetre, 1985	410.0	86	6	657.7	823.8	53 4	47.3	248.9	2 500,0	441,5
POPULATION CHARACTERISTICS	557,030	17.2	65	6,675	20, 120	26,145	9 9 9 9	16, 955	306,730	4 3. 5.55 5.55
by sex and age										
10 - 4 years 5 - 9 years 10 - 14 years 15 - 19 years 20 - 24 years 25 - 34 years 35 - 44 years 55 - 64 years 55 - 64 years 75 years and over	272 190 18 940 18 250 19 210 21 485 24 550 45 335 30 015 29 040 17 600 8 800	8	6 6 8 9 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9	3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.	0 0 0 0 0 0 0 0 0 0 0 0 0 0	13 300 1 000 1 100 1 100	4 1935 1955 1955 1955 1955 1955 1955 1955	8 6 7 8 7 8 7 8 7 8 7 8 7 8 7 8 8 7 8	148, 100 9, 960 9, 235 9, 235 11, 005 11, 005 12, 000 15, 460 15, 460 16, 790 16, 790	21.730 1.760 1.730 1.735 1.645 3.530 2.395 1.150
Female, total. 0 - 4 years 5 - 9 years 10 - 14 years 15 - 19 years 20 - 24 years 35 - 44 years 55 - 54 years 75 years and over	284, 840 18, 150 17, 285 18, 290 20, 830 20, 830 30, 990 30, 900 30, 9	«i -ii	6 6 6 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0.00	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	2 845 1 005 1 020 1 040 1 1380 1 1380 1 1380 1 1380 1 1380 1 1380	4 334 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8 5.75 5.05 5.05 5.05 5.05 5.05 5.05 5.05	158, 630 9, 635 8, 860 9, 220 10, 915 10, 915 19, 570 19, 570 18, 225 18, 360 13, 310	21 625 1 635 1 665 1 665 1 675 1 675
by marital status										
Single (never married), total	223,695	9	960	16.635	7.750	10,795	3.975	6,735	123.230	17,625
and over married and over Merried (includes seperated) Midowed Ovorced	113,415 286,230 29,880 15,105	_{ஸ்} ம்	090 090 190	22, 660 63, 015 4, 625 2, 400	3,920 10,505 1,420 450	4,645 14,210 785 355	5,225	9.010	66.835 152.895 19.910 10.695	7.475 23.635 1.630 665
			CENSUS FA	FAMILY			ECON	ECONOMIC FAMILY		
<pre>* Areas included in the Hamilton CMA, but not in the Regional Muni- cipality</pre>	Definition	ions:	Refers to a husband and a children who have never n age), or a lone parent of an one or more children who one or more children who census purposes, persons litype of arrangement are married, regardless of their they accordingly appear as in most census family tables.	husband and o have never ne parent of a children wh a children what case, persons angement an ardiess of the ngly appear a ustamily table	Refers to a husband and a wife (with or withouchildren who have never married, regardless age), or a lone parent of any marital status, wit one or more children who have never married regardless of age, living in the same dwelling. For census purposes, persons living in a common-laype of arrangement are considered as no married, regardless of their legal marital statum they accordingly appear as a husband-wife familin most census family tables.	Refers to a husband and a wife (with or without children who have never married, regardless of age), or a lone parent of any marital status, with one or more children who have never married, regardless of age, living in the same dwelling. For census purposes, persons living in a common-law type of arrangement are considered as now married, regardless of their legal marital status, they accordingly appear as a husband-wife family in most census family tables.	Refers to the same blood, m common-l as now m status, th	Refers to a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage or adoption. Persons living common-law are considered, for census purposes, as now married regardless of their legal marital status, they accordingly appear as married couples in the economic family tables.	a group of two or more persons who live in dwelling and are related to each other by arriage or adoption. Persons living law are considered, for cenaus purposes, narried regardless of their legal marital hey accordingly appear as married couples nomic family tables.	who live in the other by the living purposes, if marital ed couples

Source: Statistics Canada, Census Tract Profiles: Hamilton, Supply and Services Canada, Feb.88 [Table 2]

	Nee I ton	Ancaster. T	Burlington, C	Dundas, 1	Flamborough, T	Glanbrook, TP	Griesby, T	Hamilton, C	Stoney Creek.
Characteristics									د
	CMA/RMR								
CENSUS FAMILY CHARACTERISTICS (concluded)									
Children in Census Femilies									
Total number of children at hose	188, 485	6,580	41,730	6,510	9.985	3,690	6, 150	97,450	16.290
Under 6 years of age 6 - 14 years 15 - 17 years 18 - 24 years 25 years and over	4 8 8 4 8 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1.545 2.285 7.95 1.578 380	8.865 14.845 5.670 10.150	1.640 2.140 895 1.525 400	2.410 3.650 1.280 2.105 540	1 3 7 8 8 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0	1.510 2.165 775 1.380 320	22,745 32,485 12,020 22,355 7,845	3 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Average number of Children per census family (4).	1.2	1.3	1.3	1.2	7.1	- 4	1.3	1.2	
Persons in Private Mouseholds									
by census family status and living arrangments lotal number of persons Number of non-family persons Number of Inch relatives (Eving with relative (Eving with rel	548, 925 71, 920 15, 900	17,200	115.745	19,255	25.880 1.815 525	9.530	16.710 1.435 325	301,450 50,370 10,470	43, 155 3, 310 1, 950
Living with non-relatives only Living alone Mumber of family persons	12,615 43,405 477,005	200 490 16, 170	2,185 6,490 104,550	350 1,355 17,085	425 865 24,060	135	270 835 15,280	8.525 31.375 251.075	39.850
Average number of persons per census family	B. 1	3.3	3.2	3.1	3.3	en en	3.2	3.0	3.3
Total number of persons 65 years and over	58,535	1,575	10.275	2.215	2.030	735	1,690	37,560	3, 455
Living with relatives (5)	23,510	425	3,510	190	180	185	130	16, 165	1, 180
Living alone	1, 130	35	110	615	30	100	435	11,940	745
Number of family persons 65 years and over	36,025	1, 145	6.765	1.370	1,435	250	1.090	21,395	2.280
ECONOMIC FAMILY CHARACTERISTICS									
Economic Families									
Total number of economic families in private households	154,215	4, 925	33,015	5,550	7.260	2.685	4,715	83.920	12,140
by size of family 2 persons. 3 persons. 4 persons. 5 of more persons.	58, 405 35, 205 38, 965 21, 535	1,625 1,085 1,415 805	7.510 9.105 4.595	2, 165 1,225 1,460 695	1.986 1.325	88 S C C C C C C C C C C C C C C C C C C	1,615	35,070 19,515 18,415	3,820
Persons in Private Mouseholds									
Mumber of unattached individuals	548,825	17,200	115,740	19.260	25,880	9.530	16.715	301,445	43, 160
Number of economic family persons	492,805	16,505	107,065	17,555	24,585	9, 135	15, 605	261,545	40, 905
Average number of persons per aconomic family	3.5	3.4	3.2	3.2	3.4	3.4	en	m	60

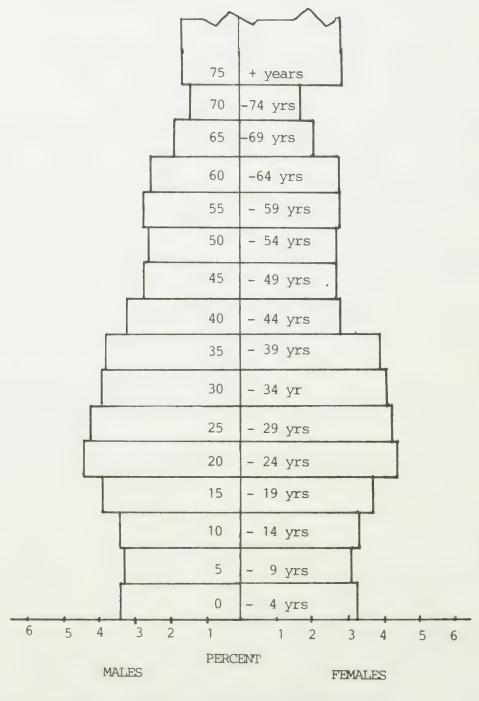
Source: Statistics Canada, <u>Census Tract Profiles: Hamilton</u>, Supply and Services Canada, February 1988 [Table 2]

	Mamilton	Ancaster, T	Burtington, C	Dundes, 7	flamborough, T	Glanbrook, TP	Grimsby, T	Hamilton, C	Stoney Creek,
Characterishics									
	CMA/RMR								
DWELLING CHARACTERISTICS									
lotal number of occupied private dwellings	201,330	5 460	40, 120	7.005	8 21%	2 975	5,625	117,930	13,995
by tenure Owned Rented On reserve(2)	71, 190	5 050 410	28 175	4,985	6,955	2,635	4,605	66,755	10,970
by type of dwelling Single-detached house Movelinent, Sor more storeys All other types 3.	120,305 38,210 65 42,740	75. 16. 18. 18. 18. 18.	24, 175 7, 190 8, 74 8, 74 8, 74 8, 74 8, 74	4,675	7.220	99 1	4,520		
MOUSEMOLD CHARACTERISTICS						Ç.		28.560	2. 105
Total number of private households	201,325	\$ 460	40 120	7 00%	occ a	460			
by size of household I person 2 persons 3 persons 6 - 9 persons 10 or more persons	4		6.490 12.015 7.665 12.725 1.25				835 1,660 1,850 1,850 2,40	31,375 36,280 20,085 26,630 3,500	13 990 1 730 1 850 2 755 5 095 5 655
by number of families Hon-family household Tensus family 2 or more census families	50, 285 148, 820 2, 120	580 825 50	7,555 32,170 395	1,560	1.035 7.040 95	315	960	36,295	1,990
Persons in Private Households [5:6] Average number of persons per household	548,925	17.200	115,745	19,255	25,880	0 2 8 6	16,710	301,445	43 155
CENSUS FAMILY CHARACTERISTICS									
Total number of census femilies in private households	153, 180	4,930	32,960	. 80 80 80 80	7,280	2,700	4, 735	R2 R20	400
by size of family 2 persons 3 persons 4 persons 5 or flore persons.	62,230 34,830 37,830 16,100	1,095	12,410 7,480 9,105 3,960	2,225 1,245 1,440 590	2.600 1,520 1,960 1,195	の ら ァ 卓 本 ト 卓 知 ら ら ら り	1,365		
by feely structure and presence of children Number of https://www.number of https://www.	135, 330 52, 120 83, 210 29, 270 36, 315 17, 620	4.655 1,555 3,105 1,005 1,390 705	29. 855 19. 775 19. 085 6. 355 8. 825 3.905	4,970 1,915 3,060 1,075 1,395	6.795 2.340 4.460 1.375 1.910	2,540 850 1,695 730 425	4,395 1,535 2,860 1,325 1,325 610	70.750 29.490 41.270 15.505 17.80	11 360 3 670 7 685 2 495 3 560 1 535
Number of lone-parent families. Nave parent 2 children at home. 3 or more children at home. 5 or all home 5 or all home 7 children at home 8 or oren at home 9 or nore children at home.	17,865 2,855 1,750 14,850 14,805 1,785 1,785	286 28 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	3,100 560 1320 1320 1315 1,315 2,40 1,315 2,40 2,40 2,40 2,40 2,40 2,40 2,40 2,40	5.40 25.50 2	485 985 80 40 40 1385 110 110	28 4 8 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	340 65 365 365 100 150 150	12.115 1.630 1.120 515 10.285 5.875 3.165 1.245	

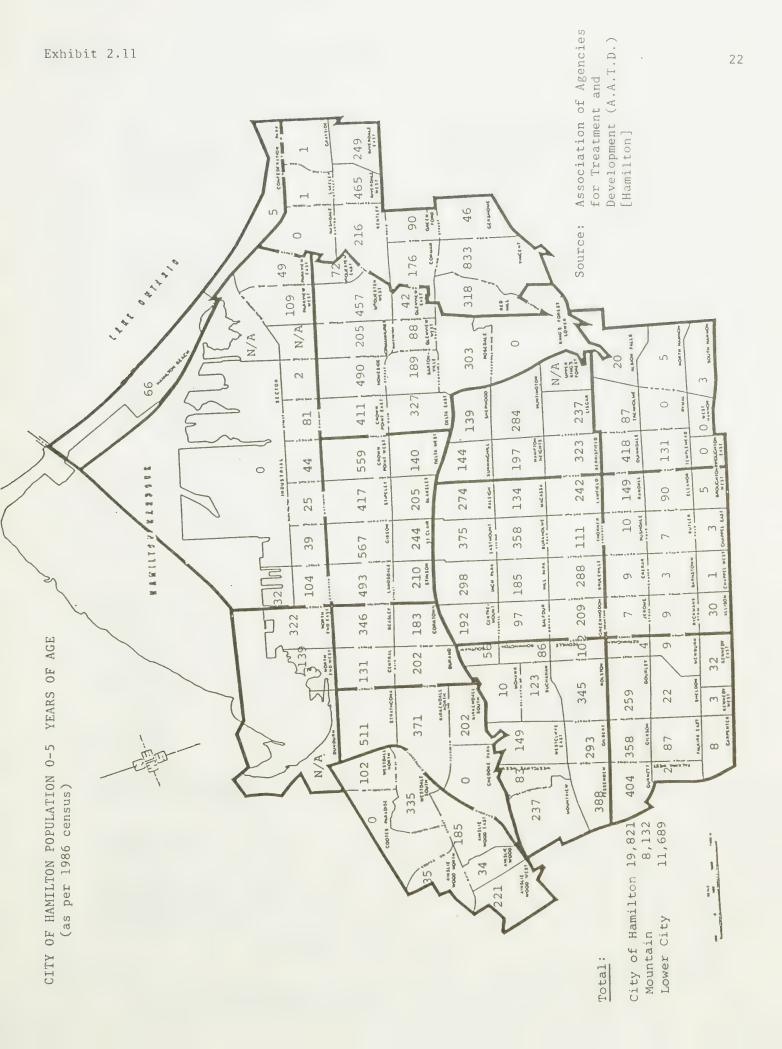
Source: Statistics Canada, <u>Census Tract Profiles: Hamilton</u>, Supply and Services Canada, February 1988 [Table 2]

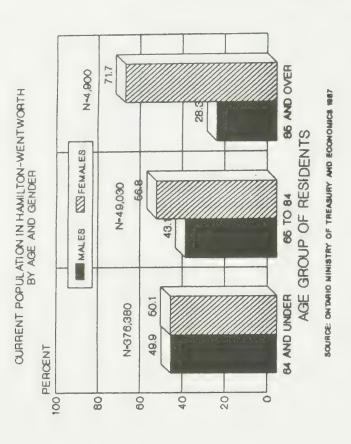
Exhibit 2.10

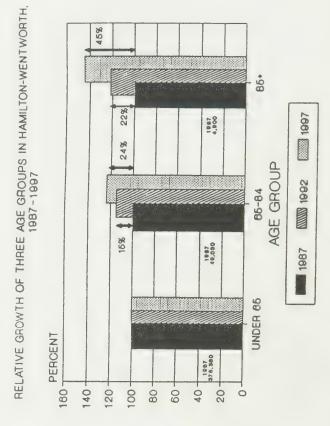
Age - Sex Pyramid for Hamilton CENSUS METROPOLITAN AREA 1986 Census of Canada

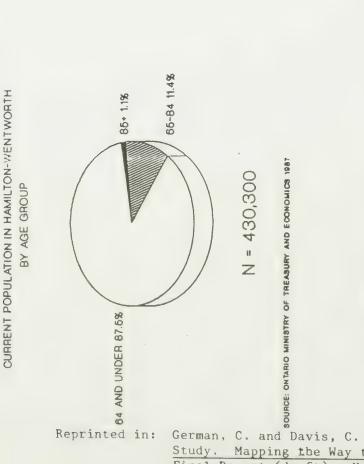


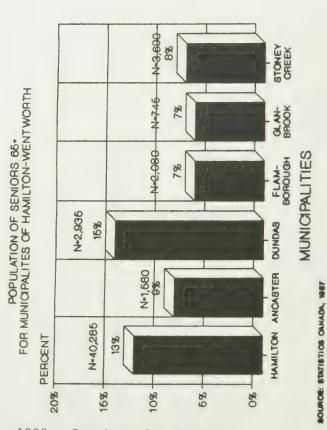
Source: 1986 Census of Canada. Summary Tabulations - Census Metroplitan Areas - Hamilton, Ontario. Table DM86A01 Statistics Canada July 1987











Reprinted in: German, C. and Davis, C. 1988. Services for Seniors

Study. Mapping the Way to the Future for the Elderly.

Final Report (draft). Hamilton: District Health Council and Regional Municipality.

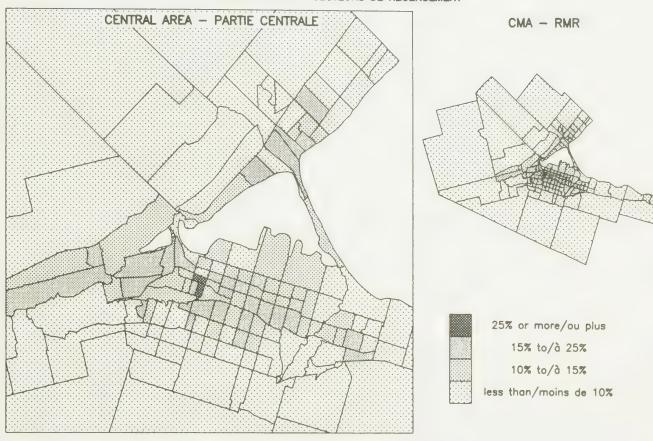
POPULATION 65 YEARS AND POPULATION DE 65 ANS ET PLUS **OVER**

Persons 65 years of age and over are expressed as a percentage of the total population.

Le nombre de personnes de 65 ans et plus est exprimé en pourcentage de la population totale.

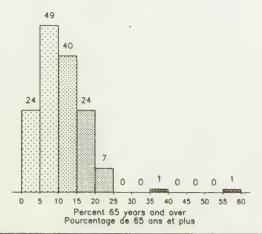
HAMILTON

CENSUS TRACTS - SECTEURS DE RECENSEMENT



NUMBER OF TRACTS BY PERCENT 65 YEARS AND OVER NOMBRE DE SECTEURS SELON LE POURCENTAGE DE 65 ANS ET PLUS

146 tracts/secteurs



COMPARATIVE FIGURES CHIFFRES COMPARATIFS

HAMILTON 10.2% (CMA - RMR) ONTARIO 10.1% CANADA 9.7%

SOURCE: 1981 CENSUS OF CANADA PRODUCED BY STATISTICS CANADA.

SOURCE: RECENSEMENT DU CANADA DE 1981 ETABLIE PAR STATISTIQUE CANADA.

From: Metropolitan Atlas Series - Hamilton, Ministry of Supply and Services: Catalogue 99-928. [July 1984]

Exhibit 2.14

REGION OF HAMILTON-WENTWORTH

ASSESSED POPULATION BY AREA MUNICIPALITY

1973 1974 1975 1976	312,162	14,180	315 19,212	30,366	863 23,364	057 10,047	Hamilton-Wentworth 398,864 401,932 408,466 409,331 41	Avg. Annual Change 3,068 6,534 865	0.77% 1.63% 0.21%
1977 1978	311,907 307,964	14,118 14,073	19,328 19,129			10,039 9,945	411,358 407,486	2,027 -3,872	0.50% -0.94%
a 1979	306,538	14,107	19,266	33,896	24,017	9,934	407,758	272	0.07%
1980	306,640	14,294	19,501	35,639	24,234	9,737	410,045	2,287	0.56%
1982	308,102	14,733	19,699	37,481	24,575	9,585	414,175	2,065	0.50%
1985	307,690	16,542	20,081	41,964	25,541	9,446	421,264	2,363	0.57%
1988	307,160	19,728	20,640	45,329	27,116	9,483	429,466	2,734	0.65%

SOURCE: MINISTRY OF REVENUE, ASSESSMENT SERVICES DIVISION AND HAMILTON-WENTWORTH PLANNING AND DEVELOPMENT DEPARTMENT May 1988

Note also that enumeration periods are not consissently spaced in time (not always 12 month gap) Change in enumeration methodology may account for some of the 'observed' population decline Q Notes:

b Based on previous 12 months

SOURCE: Statistics Canada, Census of Canada

Exhibit 2.15

POPULATION AND POPULATION SHARES NAMILTON-VENTWORTH AND AREA MUNICIPALITIES, 1971-1986

MUNICIPAL SHARE X	HAMILTON	ANCASTER	FLAMBOROUGN	DUNDAS	STONEY CREEK	GLANBROOK	HAMILTON-VENTWORTH
1971	309173	15087	20930	18740	27373	9866	401239
	17.1	N.09	5.2	4.7	6.8	2.5	100.0
1976	312003	14255	23580	19179	30294	10179	709490
	76.2	3.5	5.8	4.7	7.4	2.5	100.0
1981	306434	14428	24470	19586	36762	9765	411445
	74.5	3.5	5.9	4.8	6.0	2.4	100.0
1986	306728	17264	26142	20118	43554	9592	423398
	72.4	4.1	6.2	9.4	10.3	2.3	100.0

OTE:	NOTE: Population figures are based on current	11gures	-	0000	0	Ę	777	ent
OTE:	NOTE: Municipal Shares may not add to 100 due	Shares m	7	ot ad	P	0	100	due
	to rounding							
OURCE	SOURCE: Statistics Canada, Census of Canada	S Canada	, C	snsua	0	Ü	peug	

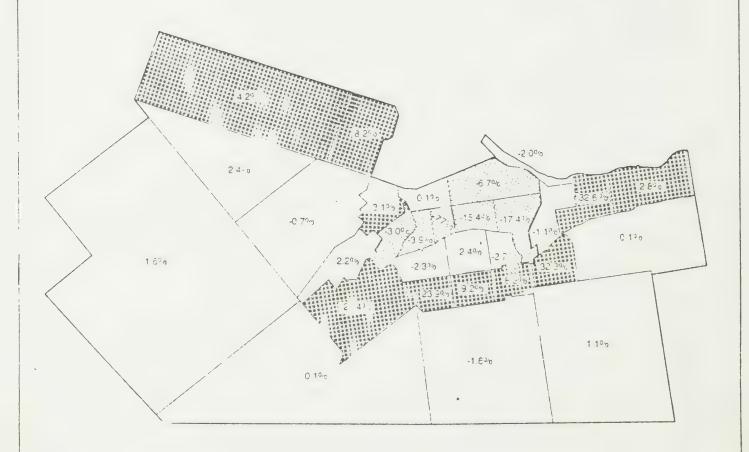
Exhibit 2.16

MUNICIPALITY	1971-76	1976-81	1981-86
Ancaster	-1.13%	0.24%	3.58%
Dundas	297.0	0.42%	0.54%
Flamborough	2.38%	0.74X	1.32%
Glanbrook	0.48%	-0.83%	-0.36%
Hamilton	0.18%	-0.36%	0.02%
Stoney Creek	2.03%	3.86%	3.38%
Hamilton-Wentworth	0.41%	0.10%	0.57x

Reprinted in: Hamilton-Wentworth Regional Planning and Development Department, Regional Population Projections Interim Report, 1988, (p. 5).

Exhibit 2.17

SHARE OF REGIONAL POPULATION GROWTH FROM 1982 TO 1985



SHARE OF GROWTH FROM 1982 TO 1985

STABLE SHARE

DECREASING SHARE

INCREASING SHARE > -2.5% $\leq -2.5\%$ $\geq 2.5\%$

Source: Ministry of Revenue, Assessment Services Division and The Hamilton-Wentworth Planning and Development Department.

1986 CENSUS DIVISION:	HAMILTON-WENTWORTH REGIONAL MU									
MALE PERALE MOTHER TONGUE MALE MOTHER TONGUE MALE PERALE MOTHER TONGUE MALE PERALE MOTHER TONGUE MALE PERALE MOTHER TONGUE MALE MALE MOTHER TONGUE MALE MOTHER TONGUE MALE MOTHER TONGUE MALE MALE MOTHER TONGUE MALE MOTHER TONGUE MALE MALE MALE MOTHER TONGUE MALE MAL		ONAL MU	DIVISION:	ON-WENTWOR	TH REGIO		DIVISION:	LTON-WENTS		
MALE PRMALE WOTHER TONGUE TOTAL MALE PREMALE MOTHER TONGUE TOTAL POPULATION TOTAL PRALE PREMALE MOTHER TONGUE TOTAL POPULATION TOTAL POP	R TONGUE AND SEX		1986 CENSUS FILE: MT86A01 POPULATION BY SELECTED MOTH	IER TONGUE	Sex	- 100%	1986 CENSUS FILE: MT86A01 POPULATION BY SELECTED MOT			
206320 210075 TOFAL POPULATION. 306730 148100 15830 TOTAL POPULATION. 4155 15280 21025 2410 158355 207870 SINGLE RESPONSES. 23905 110305 120100 BNGLISH. 4195 230 2430 26685 23005 110805 120100 BNGLISH. 4195 230 3635 3715 2000 2155 PRECHEN. 4195 230 36 366 485 2791 270 PRECHEN. 410 250 36 36 360 475 480 840 PRECHEN. 450 250 365 2540 PORTUGIBES. 485 2420 2420 PORTUGIBES. 85 45 35 355 3475 PORTUGIBES. 485 2420 2420 PORTUGIBES. 85 45 35 355 3475 SERMAH. 425 1240 2420 PORTUGIBES. 85 45 30		BHALB				HALB				SHALB
188150 168040 STINGLE RESPONSES. 140745 151280 STINGLE RESPONSES. 14155 141046 120100 STINGLE RESPONSES. 14185	423400 206320	217075				158630	TOTAL POPULATION	43550	21725	21830
95 37150 NOW-OFPICIAL LANGUAGES 56935 27915 29020 NOW-OFPICIAL LANGUAGES 165 80 85 ABORIGINAL LANGUAGES 165 80 85 ABORIGINAL LANGUAGES 1070 8545 8470 17010 8545 8470 17010 8545 8470 17010 8545 8470 17010 8545 8470 17010 8545 8470 17010 8545 8470 17010 8545 8470 17010 8545 8470 17010 8545 8470 17010 8545 8470 17010 8545 8470 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 8700 17010 <td>10 0 10</td> <td>207870 168040 2685</td> <td>SINGLE RESPONSES ENGLISH</td> <td></td> <td>40745 10805 2030</td> <td>151280 120100 2155</td> <td></td> <td>41055 31425 490</td> <td>20410 15525 250</td> <td>20645 15895 240</td>	10 0 10	207870 168040 2685	SINGLE RESPONSES ENGLISH		40745 10805 2030	151280 120100 2155		41055 31425 490	20410 15525 250	20645 15895 240
19.35 19.00 174LIAN 10.00 10		37150	NON-OFFICIAL LANGUAGES		27915	29020	NON-OFFICIAL LANGUAGES	6	635	4510
2565 24 D PORTUGUESE 45 2420 PORTUGUESE 45 5 SANISH 85 45 5 SANISH 85 45 320 35		10430	ITALIAN	17010	8545	8470	TALIAN	3200	1655	1545
355 3475 GERMAN 4255 1930 235 GERMAN 645 320 35 355 3475 GERMAN 4255 1930 235 GERMAN 645 320 35 1925 2010 DUTCH 480 240 20 0	2	2540	PORTUGUESE	00 0 00 0 00 0 00 0	2420	2420	PORTUGUESE	MG 1	LC3 L	0 4
85 85 TIDDISH 145 70 75 TIDDISH 0 0 1925 2010 DUTCH. 1770 830 940 DUTCH. 480 240 1985 2105 UKRAINIAN 3165 1510 1655 UKRAINIAN 495 255 105 165 RUSSIAN 200 80 120 RUSSIAN 15 5 2610 2945 POLISH 4505 2100 2400 POLISH 15 5 50 75 FUNISH 100 35 55 PUNISH 10 0 0 1495 1555 HUNGARIAN 2480 1210 1270 HUNGARIAN 245 125 1270 120 245 125 120 245 125 120 245 125 120 245 125 120 245 125 120 245 125 120 1210 1270 140 1210 1270<		3475	GERMAN	4255	1930	2325	GERMAN	6 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	320	330
1985 2105 UKRAINIAN. 1700 0330 340 UURAINIAN. 495 255 105 105 UKRAINIAN. 495 255 255 2610 2945 POLISH. 200 80 120 RUSSIAN. 15 5 105 POLISH. 100 35 55 FINNISH. 100 35 55 FINNISH. 100 240 POLISH. 100 240 POLISH. 120 645 315 125 1495 1555 HUNGARIAN. 2480 1210 1270 HUNGARIAN. 245 125 125 125 BUNJABI. 120 820 785 GREK. 120 65 285 235 ARABIC. 60 25 245 245 200 ARABIC. 60 25 350 PUNJABI. 165 885 240 235 PUNJABI. 165 885 240 235 PUNJABI. 165 885 130 PUNJABI. 165 885 1010 1025 CHINRSE. 165 85 45 290 VIETNAMESE. 5 5 5 5 130 PUNJABI. 165 885 1010 1025 CHINRSE. 575 290 VIETNAMESE. 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	-	90.00	YIDDISH.	145	70	100 C	YIDDISH	0	0	0 0
105 165 RUSSIAN. 200 80 120 RUSSIAN. 15 5 2610 2945 POLISH. 4505 2100 2400 POLISH. 10 0 50 75 FINNISH. 100 35 55 FINNISH. 10 0 1495 1555 HUNGARIAN. 2480 1210 1210 HUNGARIAN. 245 125 285 235 ARABIC. 2480 1210 1270 HUNGARIAN. 245 120 248 120 245 120 25 120 245 120 245 120 245 120 245 120 245 120 25 25 25 25 25 25 25 25 25 25 25 45 25 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45		2105	URBAINIAN	3165	1510	1655	URRAINIAN	# # ∞ ∞ ⊃ ℃	255	240
2510 2945 POLISH		165	RUSSIAN	200	80	120	RUSSIAN	15	ю	0
1495 1555 HUNGARIAN 2480 1210 1270 HUNGARIAN 245 125 125 126 126 126 126 126 126 126 126 127 120		2945	POLISH	1505	2100	2400	POLISH	645	315	33
935 885 GREEK		1555	HUNGAPIAN	2480	1210	1270	HUNGARIAN	245	125	125
285 235 ARABIC		40 00	GREEK	1610	820	785	GBERK	120	65	09
355 350 PUNJABI		23.55	ARABIC	445	245	200	ARABIC	0.9	25	30
1130 1145 CHINBSE		350	PUNJABI	405	240	235	PUNJABI	165	MC9 000	80
305 290 VIETWAMESE 575 290 280 VIETWAMESE 5 5 5 5 1 180 315 TAGALOG, PHILIPINO 40 15 180 315 TAGALOG, PHILIPINO 40 15 180 7905 OTHER LANGUAGES 11775 5840 5935 OTHER LANGUAGES 2770 1390 1 3390 9205 WULTIPLE RESPONSES 14705 7350 7355 WULTIPLE RESPONSES 2500 1315 1		1145	CHINESE	2035	1010	1025	CHINESE	00 10	45	6.3 PC3
180 315 TAGALOG, PHILIPINO 430 165 265 TAGALOG, PHILIPINO 40 15 7860 7905 OTHER LANGUAGES 2770 1390 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		290	VIBTNAKESE	575	290	280		LC9	ເດ	LC3
5 9390 9205 MULTIPLE RESPONSES 14705 7350 7355 MULTIPLE RESPONSES 2500 1315		315	TAGALOG, PHILIPINO	430	165 5840	5935	TAGALOG, PHILIPINO	40 2770	1390	20
		9205		14705	7350	7355		2500	23	1180

Ethnocultural Data Base, Ontario Ministry of Citizenship [5th Floor, 77 Bloor W., Toronto, M7A 2R9; 4]6-965-5280] Source:

	NAL KU	- 100%	PBHALB	12845	12605 11235 100	1970	0	115	55	143	285	0	400	65	C)	10	LC?	4.5	10	0	12	10	KS.	10	180	235	
	HAMILTON-WENTWORTH REGIONAL	TONGUE AND SEX	MALE	13295	13045 11585 80	1275	9 kG	150	6.5	0	290	0	430	7.0	LC3	65	0	35	50	0	10	10	10	NC9	210	250	
30 PLAMBOROUGH	ON-WENTWO	ER TONGUE	TOTAL MA	26140	25655 22825 180	26.45	0	260	120	10	570	LC3	830	130	10	135	LC3	000	30	0	25	20	10	10	395	06+	
CENSUS SUBDIVISION: 30 PLA	CRNSUS DIVISION: HAMILT	1986 CENSUS FILE: MT86A01 POPULATION BY SELECTED MOTHER	NOTHER TONGUE	TOTAL POPULATION	SINGLE RESPONSES BNGLISH	NON-OPPICIAL LANGIAGES	ABORIGINAL LANGUAGES	ITALIAN	PORTUGUESE	SPANISH	GERMAN	YIDDISH	DUTCH	UKRAINIAN	RUSSIAN	POLISH	FINISH	HUNGARIAN	GREEK	ARABIC	PUNJABI	CHINESE	VIBTNAMESE	TAGALOG, PHILIPING	OTHER LANGUAGES	MULTIPLE RESPONSES	
	NAL MU	- 100%	PBMALB	10550	10380 9400 85	006	0	95	10	10	245	10	95	22	30	20	0	20	15	0	15	30	0	10	175	165	
	RTH REGIC	AND SEX	MALE PE	9570	9400 8500 50	000	0	115	ю	ю	235	10	80	0.7		0#	0	52	20	MES	10	30	0	0	195	170	
DUNDAS	HAMILTON-WENTWORTH REGIONAL	ER TONGUE AND	TOTAL MA	20115	19780 17900 130	LCT LCT C	0	205	15	20	480	25	185	100	45	06	10	105	ري ري	LED	25	55	0	<u></u>	350	60 60 70	
CENSUS SUBDIVISION: 26 DUN	CENSUS DIVISION: HAMILT	1986 CENSUS FILE: MT86A01 POPULATION BY SELECTED MOTHER	MOTHER TONGUE	TOTAL POPULATION	SINGLE RESPONSESRRENCH	NON-OPPICIAL LANGUAGES	ABORIGINAL LANGUAGES	ITALIAN	PORTUGUESE	SPANISH	GERMAN	YIDDISH	DUTCH	UERAINIAM	RUSSIAN	POLISH	TSIZZIG	HUNGARIAN	GREE	ARABIC	PUNJABI	CHINESE	VIBTWAMESE	TAGALOG, PHILIPINO	OTHER LANGUAGES	MULTIPLE RESPONSES	
	NAL MU	- 100%	PEMALE	8570	8420 7385 55	086	0	135	KD.	10	195	0	225	000	0	09	0	3	12	0	МЭ	45	0	Lette	150	150	
	RTH REGIO	S AND SEX	MALS PI	8695	8530 7490 40	1005	0	160	10	10	200	0	225	-32	LC3	09	MC9	45	10	МЭ	МЭ	6.3	LC?	LC9	155	165	
ASTER	HAMILTON-WENTWORTH REGIONAL MU	IBR TONGUE	TOTAL M	17260	16950 14870 95	90	0	295	10	12	390	ыз	450	155	мэ	120	ro.	000	20	0	10	80	ю	10	305	E0 	
CENSUS SUBDIVISION: 14 ANCASTER	CENSUS DIVISION: HAMIL!	1986 CEMSUS FILE: MT86A01 POPULATION BY SELECTED MOTHER TONGUE AND SEX - 100%	MOTHER TONGUE	TOTAL POPULATION	SINGLE RESPONSES	NOW-OPPICIAL LANGILLER	ABORIGINAL LANGUAGES	ITALIAN	PORTUGUESE	SPANISH	GERMAN	WIDDISH	DUTCH	UERAINIAN	RUSSIAN	POLISH	PINESE	HUNGARIAN	GBER	ARABIC	PUNJABI	CHINESE	VIBTNAMESE	TAGALOG, PHILIPINO	OTHER LANGUAGES	MULTIPLE RESPONSES	

Ethnocultural Data Base, Ontario Ministry of Citizenship [5th Floor, 77 Bloor St.W., Toronto, M7A 2R9; 416-965-5280] Source:

CENSUS SUBDIVISION: 9 GLANBROOK

HAMILTON-WENTWORTH REGIONAL MU CRNSUS DIVISION:

1986 CBNSUS FILB: MT86A01 POPULATION BY SELECTED MOTHER TONGUE AND SEX - 100%

	ហេ	10 CO 10	0 <		0	200		رم دم د		0	25	010		0	0	0	1479 000	40
FBWALB	465	404		E pan	1 4	10		guerrell.	m		2							
MALE	4930	4805	010	011		a <>		0 0	30 0	0	20	us uc	0	МЭ	0	0	000	€-1 6-3 14:3
TOTAL	9590	9 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	97.5	105	5 4	061		res la	09	0		0 4	. 0	0	0	0	170	245
MOTHER TONGUE	TOTAL POPULATION	SINGLE RESPONSES RNGLISH	ON-OFFICIAL LANGUAGE	ALIAN	PANISH	GERMAN	UTCH	KRAIN	POLISH	FINNISH	HUNGARIAN	TO TO TO TO	UNJA	HINBS 8	VIBTNAMESE	TAGALOG, PHILIPPINO	THER L	MULTIPLE RESPONSES

Ethnocultural Database, Ontario Ministry of Citizenship Source:

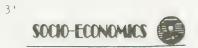
ONTARIO SCHOOL POPULATIONS AS OF SEPTEMBER 1986

HEALTH UNIT. HAMILION-WENTWORTH REG. HEALTH UNIT

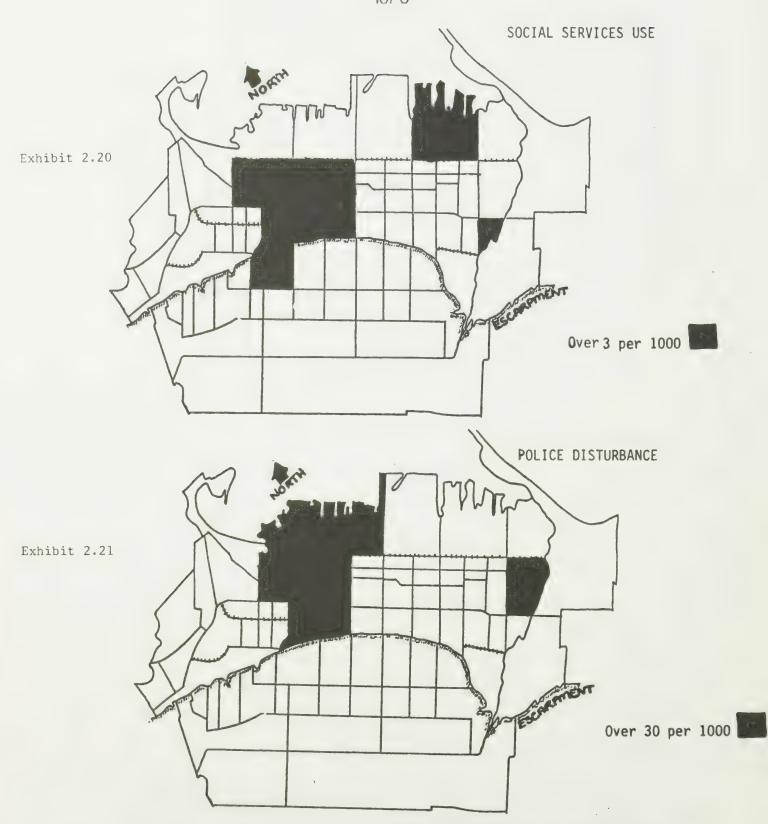
OF NO. OF TEACHERS		0 1620	27 1293	14 47			11		52 725	7 204	99		1	646	189	4110
NO.		100					88				10			7		239
TOTAL		34924	20322	318			о» 		16890	6104	115				4270	83048
TYPE OF SCHOOL	PUBLIC SCHOOLS	ELEMENTART	SECONDART	TRAINABLE RETARDED	HOSP. ELENENTARI	HOSP. SECONDARI	PROV. CARE AND TREATMENT CENTRES	SEPARATE SCHOOLS	ELEMENTARY	SECONDARI	TRAINABLE RETARDED	BOSP. ELEMENTARI	BOSP. SECONDARI	PROV. CARE AND TREATMENT CENTRES	PRIVATE SCHOOLS	TOTALS

EXTRACTED FROM STATISTICS PRODUCED BY THE MINISTRY OF EDUCATION

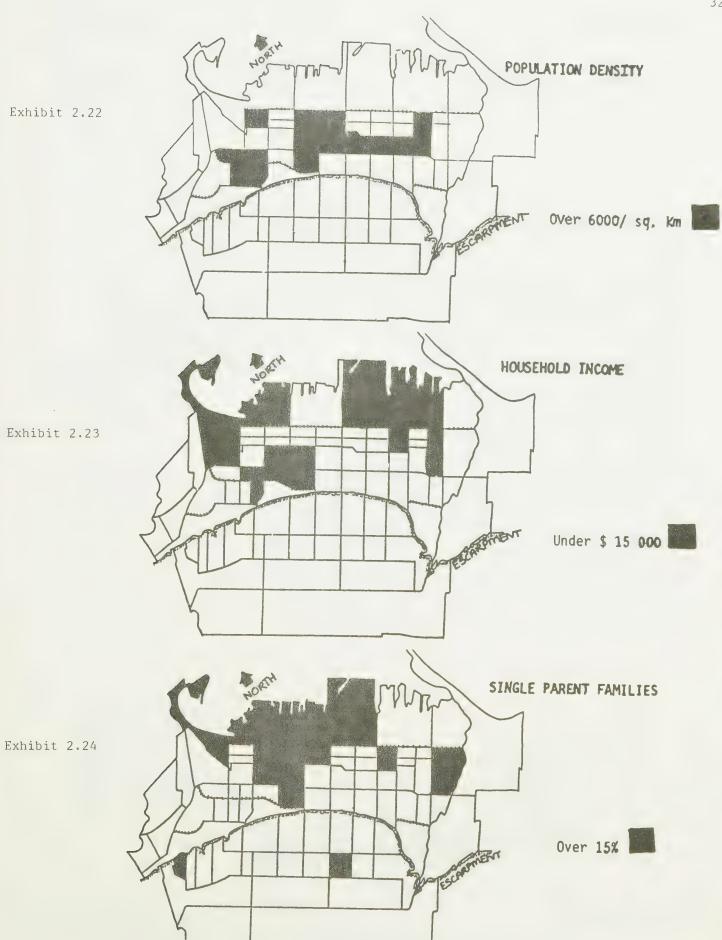
DATA SUPPORT SERVICES PUBLIC REALTH BRANCE



Socio-Economic Indicators* City of Hamilton 1979



*Source: McAuley, R.G. and Lee, W.L. 1982. <u>City of Hamilton, Census Tract Maps of Demographic and Service Utilization Data</u>. Hamilton: Hamilton General Hospital, Family Practice Unit.



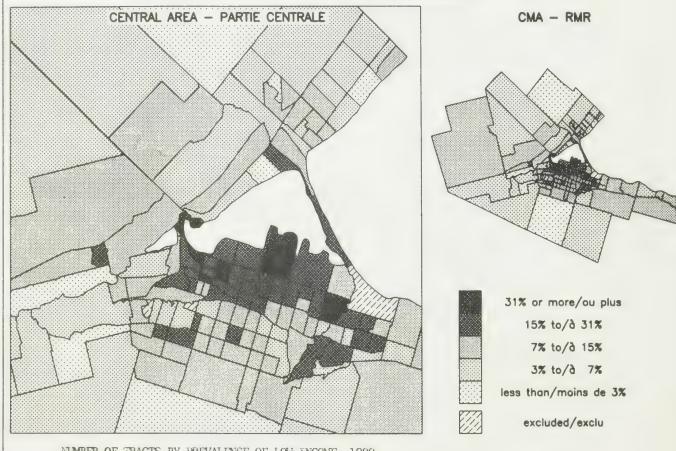
Prevalerication income is the percentage of economic families in the CT that fall below the low income cutoffs. Data for CTs with a total population of less than 250 persons are excluded. See the introductory text for the universe covered and definitions.

INCIDENCE OF LOW INCOME, 1980, ECONOMIC FAMILIES 1980, FAMILLES ÉCONOMIQUES

Le taux des faibles revenus correspond au pourcentage de familles économiques dont le revenu est inférieur au seuil de faible revenu. Les données relatives aux SR dont la population totale est inférieure à 250 habitants sont exclues. La description de l'univers et les définitions figurent dans l'introduction.

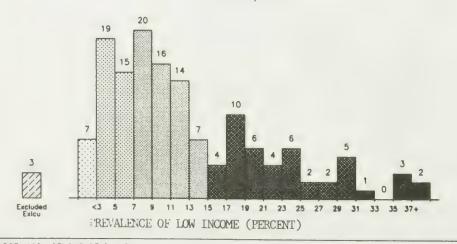
HAMILTON

CENSUS TRACTS - SECTEURS DE RECENSEMENT



NUMBER OF TRACTS BY PREVALENCE OF LOW INCOME, 1980

146 tracts/secteurs



COMPARATIVE FIGURES CHIFFRES COMPARATIFS

HAMILTON 12.3% (CMA - RMR) ONTARIO 11.4% CANADA 13.0%

SOURCE: 1981 CENSUS OF CANADA PRODUCED BY STATISTICS CANADA.

From:

SOURCE: RECENSEMENT DU CANADA DE 1981 ETABLIE PAR STATISTIQUE CANADA.

Metropolitan Atlas Series - Hamilton. Ministry of Supply and Services: Catalogue 99-928. [July 1984]

SELECTED HEALTH CARE PERSONNEL, SOUTH AND CENTRAL ONTARIO, 1984

Ontario Ministry of Health, Community Health Programs Branch, Statistical Report on Community Health, 1984. (Table 7.1) Ontario, Source:

Eisenstein (Executive Director, Community Health Programs Branch) Gia Contact:

Exhibit 2.27 BED CAPACITY FOR THE ELDERLY HAMILTON-WENTWORTH, 1987

HOMES FOR THE AGED BED CAPACITY

	Residential (Type 1)	Extended Care (Type 2)	Total Number of Licensed Beds
HAMILTON CITY CORE			
Canadian National Institute for the Blind	59	-	59
HAMILTON MOUNTAIN			
Macassa Lodge	157	209	366
Idlewyld	101	-	101
DUNDAS			
St.Joseph's Villa	200	170	370
Wentworth Lodge	91	119	210
TOTAL CAPACITY	608	. 498 ===	1106
(Good Shepherd	26)		

NURSING HOME BED CAPACITY

	HAMILTON	Extended Care	Homes for Special Care	Total
1.	Beacon Hill Lodge	248	-	248
2.	Brownstone	105	•	105
3.	Clarion	93	7	100
4.	Grace Villa	160	24	184
5.	Hamilton Convalescent	53	7	60
6.	Parkview Nursing Centre	121	3	124
7.	Proctor Manor	20	3	23
8.	St. Elizabeth's	179	. 5	184
9.	St. Olga's	50	40	90
10.	Victoria Sub-Total	1070	19	60 1178
	STONEY CREEK			
11	Brodie's	41	•	41
12.	Pine Villa	33	5	38
13.	Heritage Green Sub-Total	34	5	34 113
	DUNDAS			
14.	Blackadar's	80	ob gammalana	80
	TOTAL CAPACI	TY 1258	113	1371

Source: Long Term Care Task Force, Hamilton-Wentworth District Health Council,

Inventory of Long Term Care Facilities/Services for the Hamilton-Wentworth

Region, July 1987

Exhibit 2.28

HAMILTON-WENTWORTH DISTRICT HOSPITAL BED ALLOCATIONS - 1987

INSTITUTION	ACUTE	PSYCHIATRIC	CHRONIC	GENERAL REHAB.	SPECIAL REHAB.	ALCOHOL TREATMENT	GERIATRIC	TOTAL
HAMILTON GENERAL	385	. 30		The state of the s	1	, 1	1	415
HENDERSON GENERAL	475	. 26	38	75	!	1	ę B	614
CHEDOKE	75	1	120	20 *	91	20	20	346
MCMASTER DIVISION	328	29	35	!	1	†	1	392
ST.JOSEPH'S	523	3.4	30	20	1	!	;	607
HAMILTON PSYCHIATRIC		407	es es	1	1	1		407
ST.PETER'S HOSPITAL		1	284		!	1	1	284
TOTAL	1786	526	507	115	16	00	00	3000

* Used as chronic beds.

Long Jerm Care Task Force Hamilton-Wentworth DistrictHealth Council Inventory of Long Lord Care Leilitic /Services for the Hamilton Leatworth Region, July 1987 Source:

Exhibit 2.29

INSTITUTIONAL ACCOMMODATION, 1984

ONTARIO AND		HO	HOSPITAL BEDS			INURSING	HOMES FOR THE AGED	THE AGED
LOCAL HEALTH	ACTIVE			PSYCH	PSYCHIATRIC	I HOISES I	EXTENDED	
AGENCIES BY REGION	PSYCHIATRIC ITATION	ITATION	CHRONIC	UNITS	HOSPITALS	(CLICENSED	CARE BEDS	RESIDENTIAL BEDS
ONTARIO	33,676	1,669	10,790	2,460	4,917	29,486	12,843	15,104
SOUTHWEST	5,263	200	2,227	363	1,068	5,573	1,638	2,610
BRUCE	197		75			246	137	117
ELGIN-ST. THOM.	1 204	-	105		925	322	136	275
GREY-0. SOUND	368	23	146	57	_	1 451	39	152
HUROM	198	_	1 85 1	20	_	316	211	163
KENT-CHATHAM	375	19	121	30		505	117	162
LAMBTON	392	50	108	54		435	220	167
HIDDLESEX-LON.	1,749	102	677	66	544	1,386	575	268
OXFORD	586		112	19		539	58	200
PERTH	277		141	18			102	502
MINDSOR-ESSEX	1,217	2	457	116		1,022	274	468
CENTRAL MEST	090'9	962	1,780	395	009	5,123	2,536	3,132
BRANT	392		145	39		363	244	181
HALD HORFOLK	1 240	_	96		_	1 332	270	179
HALTON	156	35	92	29	_	1 450	231	312
HAM-HENTWORTH	1 1,623	902	527	121	009	1,340	155	1 687
NIAGARA	1,212	22	416	124		1,034	751	956
MATER LOO	1,053	35	347	52		956	316	537
WELL-DUFF-6.	584		171			649	283	278
CENTRAL EAST	13,712	1,065	4,010	1,078	1,646	11,146	4,531	5,756
DURHAM	767		192	5.6	1 504	1,328	489	329
HAL.,K.,P.R.	320	_	135		_	1 999	187	206
PEEL	853	_	132	68	-	1,052	239	316
PETERBOROUGH	184	_	98	55	_	360	125	322
SINCOE	1 742	_	125	34	1 542	956	332	384
METRO TORONTO	10,022	1,065	3,217	929	009	5,741	2,840	3,849
EAST YORK	1 560			07	1	1 25	236	154
ETOBICOKE	799	_	120	09	-	723	340	138
HORTH YORK	1,716	454	929	183	-	1,284	833	598
SCARBORO	1,051	96	427	69	1	1,667	372	712
TOROUTO	, S	655	1,665	364		1,662	1,059	1,609
YORK BOROUGH	_	92	379	00	<u> </u>	380		371
4	-			***				

Ontario Ministry of Health, Community Health Programs Branch, Statistical Report on Community Health, Ontario, 1984. (Table 7.2) Source:

Gia Eisenstein (Executive Director, Community Health Programs Branch) Contact:

(1) HEALTH CARE COSTS, 1985

EXPENDITURE (1,000)	AND	SERVICES (2)	DRUG BENEFIT PLAN	EXPENDI - PER TURE CAPIT	PER	FOR SPECIAL CARE	EXPENDI - I	PER CAPITA (3)	CARE	OTHER HEALTH COSTS
8,126,396.0	4,071,886.7	2,398,999.5	289,986.2	68,438.5	9.76	86,226.6	104,480.5	=	53 251,076.9 835,307.	835,307.1
1,240,240.7	643,821.2	322,722.8	41,903.51	14,008.5	10.78	12,459.91	13,819.3	10.63	36,281.0	1155,224.5
30,779.3	15,226.2	0.254.2	2.042.4			607.3	804.1			
42,978.7	23,202.2	_		871	_	677.9	851.6		1,973.	1,727.
88,052.8			2,435.4	980.6		724.2	959.4	12.73		N -
35, 380. 3			1,827.81	1.00/	-	242.01	717.71		1,506.	1 6 067 7
74,655.7	39,003.4	20,961.21	3,462.81	1,000.9	10.30	1.229.1	-			_
4.102.40		-	10.572.01	7.718.5	-	3,143,6	2.924	8.85	_	10
54. 306. A			2.807.6	950.8		834.8	810.	9.39	_	1 2,240.
6A.161.5	_		2,162,11		13.28	642.9	462.2	6.89		1,397.
257,590.5	133,306.6	1 61,853.	10,179.9	N	8.80	3,027.0	3,761.5	1 11.90	8,814.0	13,
1,363,649.4	9.001.569	410,855.7	56,589.8	16,017.3	9.09	16,826.81	20,984.7	11.91	48,996.7	98,277.8
77,900.1	41,725.1	~	3,436.8	1,165.6		1,021.91	1,379.3	12.90	2,975.7	-
45,078.5	20,497.6		2,956.4	1,199.2	13.124	879.11	1,148.91	12.57		
158,160.5	_	-	8,698.3	2,589.2		2,586.4	1,959.1	7.20		
467,869.5	~	122,322.	13,600.5	4,287.1	1 10.14	4,044.11	9,045.1	21.40	11,775.6	1 34,844.31
260.975.8	_	92,141.	12,093.0	2,851.8		3,595.6		7.48	10,470.4	9,428.11
207,472.3		_	10,342.01			3,075.2	1,680.01	1 5.79	8,954.3	_
121,168.7	64,542.9		5,462.8	1,463.11	8.57	1,624.3	i	16.25	4,729.8	5,999.2
7 872 067 2	1 254 449 A	1 1 168 610 6	122.812 1	31.124.5	1 0 8	14.517.9	36.346.4	9.16	9.14 106.333.6 374.374.	374.374.7
2007.4301						b				
181,457.2	_	_	9,975.6	2,490.8		2,966.2	2,480.91	7.75	8,637.1	7,637.9
65,421.8	_	_	4,253.9	1,040.3		1,264.91	1,282.5		3,683.	
275,516.7	estancibo	95,557.	17,931.5			5,331.9	3,938.0		-	36,222.
97,116.2	-	-	_		18.27	1,013.1	2,222.7			2,894.
141,893.9	1 66,950.1	-	-		9.65	2,272.1	2,787.6	11.67		-
2,625,551.4	11,3	40	9	17,674.0	8.161	20,804.71	20,680.1	9.55	60,579.6	120
142.570 6		_	9,635.2	2,183.0	6.73	2,865.01	1,954.6	6.021	8,342.4	1 5,077.91

THE ITEMIZED MEALTH CARE EXPENDITURES MERE OBTAINED FROM THE REPORT ENTITLED "WEALTH EXPENDITURES BY COUNTY AND HEALTH DISTRICT, FISCAL YEAR 1984/85" PREPARED BY THE INFORMATION RESOURCES AND SERVICES BRANCH OF THE MINISTRY OF HEALTH. MOTES: 1.

INCLUDES PAYMENTS TO PHYSICIANS AND PRACTITIONERS WHOSE MAILING ADDRESSES WERE NOT MITHIN THE RECOGNIZED REGIONS, COUNTIES AND DISTRICTS OF ONTARIO. 2

TOTAL EXPENDITURES INCLUDE CHIARIO PSYCHIATRIC HOSPITAL COSTS OF \$257,603.6 WHICH WERE ALLOCATED BY REGION.
Ontario Ministry of Health, Community Health Programs Branch, Statistical Report on Community Health, THE PER CAPITA RATES WERE CALCULATED BASED ON THE 1985 CENCUS POPULATION PREPARED BY THE MINISTRY OF TREASURY AND ECONOMICS. P)

Contact: Gia Eisenstein (Executive Director, Community Health Programs Branch) Ontario, 1984.(Table 8.1) Source:



General Health Status

-mortality
-morbidity

Chapter 3

APPROPRIATE USE OF MORBIDITY AND MORTALITY STATISTICS

R. Alder, L. Eastridge

June 1988

Morbidity and mortality statistics are frequently used to compare a given health unit's (or municipality's) disease experience with 1) that of the total province and 2) that of surrounding health units. When, in either application, interest is in factors other than age that may be related to disease occurrence (e.g. environmental pollution), an age-standardized statistic should be employed and the crude rate (TOTAL RATE) avoided. Two different age-standardized statistics are provided in Exhibits 3.8 - 3.13: standardized mortality (or morbidity) ratio (SMR) and standardized mortality (or morbidity) rate (SRATE). The appropriate use of these age-standardized statistics under common applications is discussed below.

1) Comparison of municipality with the province

When comparing Hamilton-Wentworth with the province, either the SMR or the SRATE can be validly used, though the former is to be preferred. The SMR itself is a comparison of a health unit with the province. This statistic is the ratio of the observed total rate in the health unit over the expected total rate. In calculating the expected total rate, the provincial age-specific rates are applied to the municipality's age distribution. Hence, both the observed rate and the expected rate of the SMR are derived from the same age distribution, that of the municipality. The SRATE is based on a different method of agestandardization and, though it is the standardized rate of only the given municipality, it too can be put into a ratio over the provincial observed rate. This ratio is called the comparative mortality figure (CMF) (Fleiss, 1981). In calculating the SRATE, the health unit's age-specific rates are applied to the provincial age distribution. Hence, both the SRATE and the observed provincial rate are derived from the same age distribution, that of the province. Both approaches, therefore, completely adjust for differences in age distribution. the SMR, however, is preferable to the CMF for the following two reasons. First, it weights the age-specific mortality (or morbidity) rates by the municipality's age distribution. distribution. The CMF, on the other hand, weights by the provincial age distribution. thus, in the SMR the mortality rates of the health unit are weighted according to the population they actually affect (Kleinman, 1977). Second, the SMR is usually subject to less random error than the CMF. This greater statistical stability derives from the lack of dependence of the SMR on age-specific rates of the health unit which, due to smaller numbers, will be less stable than the provincial rates (Rothman, 1986).

The SMR is typically expressed as the observed number of deaths over the expected number of deaths instead of the observed rate over the expected rate. This is because the denominators of both the observed and expected rates are identical, the total population of Hamilton-Wentworth. Thus, an SMR of 1.00 indicates that the number of deaths observed in the municipality was equal to the number that was expected to occur. In other words, our age-specific mortality rates for the given disease were the same as those of the province. An SMR of 1.40 indicates there were 40% more deaths observed than were expected in the municipality based on baseline provincial values.

The SMR provided is actually a point estimate of a range of SMR values that could have occurred with the given data due to random variability in disease occurrence. One can be 95% confident that this range falls between the lower and upper limits provided (extreme right column in Exhibits 3.8 - 3.13). This 95% confidence interval can be used to determine if the SMR is statistically significant (at alpha = 0.05). If the value of 1.00 $\frac{\rm does\ not\ fall\ on\ or\ between\ the\ given\ lower\ and\ upper\ limits\ then\ the\ SMR\ is\ statistically\ significant. The confidence interval\ also\ provides\ two\ additional\ pieces\ of\ information. First, it indicates how stable the calculated SMR is: the wider the interval\ the\ less\ stable\ is\ the\ given\ SMR. Second,\ the\ confidence\ interval\ indicates\ the\ highest\ and\ lowest\ values\ of\ the\ SMR\ that\ are\ consistent\ with\ the\ given\ data.$

Finally, note that within a given municipality the SMRs for various diseases can be compared validly.

2) Comparison with other municipalities/health units

When comparing the mortality (or morbidity) of one health unit with that of another, the SRATE is to be preferred over the SMR. In calculating the expected number (denominator) of the SMR the provincial age-specific rates are applied to the age distribution of each municipality. Hence, the SMRs of various health units are based not on one age distribution, but on a number of possibly different age distributions. In contrast, SRATE is calculated by applying the age-specific rates of each health unit to one age distribution, that of the province. For this reason, two health units with the same set of age-specific rates but different age distributions will have equal SRATEs, but may have unequal SMRs (Kleinman, 1977). A common way of comparing the SRATEs in two health units is to obtain a ratio, called the standardized rate ratio (SRR) (Rothman, 1986). If, for example, the SRR of area A over area B was 2.00, one would say that the rate of the given disease in A is twice that in B.

Summary

When comparing a given municipality (or health unit) with the province, the SMR and its 95% confidence interval is preferable to the SRATE. However, when comparing one health unit with another the SRATE is preferable.

References

Fleiss, J.L. 1981. <u>Statistical methods for rates and proportions</u>. New York: John Wiley & Sons.

Kleinman, J.C. 1977. Age-adjusted mortality indexes for small areas: application to health planning. American Journal of Public Health. 67:834-40.

Rothman, K.J. 1986. Modern epidemiology. Boston: Little, Brown & Co.

Source: adapted from R. Alder and L. Eastridge, 1988, Morbidity and mortality statistics, Hamilton-Wentworth, 1981 & 1986, Toronto: Ontario Ministry of Health.

NOTE: Population figures serving as denominator in rate and ratio calculations for

Exhibits 3.8 - 3.13 are found below. (Note that they are slightly at variance with figures provided in Chapter 2.

Region	Gender	< 1 yr	1-14	15-24	A g e 25-44	in y <u>45-64</u>	e a r s 65-74	75-84	85+	total
Hamilton- Wentworth	Male Female Total	2884 2785 5669	39276 37630 76906	34775 34505 69280	63680 65420 129100	44530 46610 91140	14050 16845 30895	5915 9945 15860	1220 3345 4565	206330 217085 423415
Ontario	Male Female Total	64659 61615 126274	893581 849570 1743151	761310 742460 1503770	1433255 1466620 2899875	904155 931795 1835950	269915 332700 602615	116605 186115 302720	24325 62950 87275	4467805 4633825 9101630

Source: as per above

A note concerning

ONTARIO MINISTRY OF HEALTH CLASSIFICATION OF MORBIDITIES

Note that Chapter headings (17) are groupings of the Ontario Broad Codes (217), which are themselves groupings of the ICD-9 codes. The 15 leading causes of death are clearly time and place dependent, and represent alternative Ministry categorizations of ICD-9 codes. Breakdowns of heading titles are provided below. Classifications of Broad Codes within Chapters (and associated ICD-9 codes) are detailed in a publication titled Revised Ontario Broad Codes from the Data Development and Evaluation Branch of the Ministry of Health

ONTARIO BROAD CODE CHAPTERS

Chapter	Description
I	Infectious and parasitic diseases
II	Neoplasms
III	Endocrine, nutritional and metabolic diseases and immunity disorders
IV	Diseases of blood and blood-forming organs
V	Mental disorders
VI	Diseases of nervous system and sense organs
VII	Diseases of the circulatory system
VIII	Diseases of the respiratory system
IX	Diseases of the digestive system
X	Diseases of the genitourinary system
XI	Complications of pregnancy, childbirth and the puerperium
XII	Diseases of the skin and subcutaneous tissue
XIII	Diseases of the musculoskeletal system and connective tissue
XIV	Congenital Anomalies
XV	Certain conditions originating in the perinatal period
XVI	Symptoms, signs and ill-defined conditions
IIVX	Injury and poisoning
V-codes	Supplementary classification of factors influencing health status and contact with health services
E-codes	Supplementary classification of external causes of injury and poisoning

15 LEADING CAUSES OF DEATH

Cause#	ICD-9	Description
5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	390-398,410-416,420-429 140-208,230-234 430-438 E800-E949 440-448 480-487 E950-E959 250 571 490-493 740-759 760-779 401-405 330-316 531-533 Not above	Diseases of the heart Malignant neoplasms Cerebrovascular diseases Accidents Diseases of the arteries, arterioles, and capillaries Pneumonia and influenza Suicide and self-inflicted injury Diabetes mellitus Chronic liver diseases Bronchitis, emphysema and asthma Congenital anomalies Perinatal conditions Hypertension Neurotic disorders Peptic ulcers Other causes
		Peptic ulcers Other causes

THE 15 LEADING CAUSES OF DEATH IN ONTARIO BY FREQUENCY OF OCCURRENCE : 1986

Exhibit 3.3

	BY FREQUENCY OF OCCURRENCE : 1986		i doctori	4223	1700	1640			9801			SUPPL. CAUSES MAY NOT BE LISTED DUE TO THE FREQUENCY BEING ZERO	
	THE LEADING SUPPL. CAUSES OF DEATH IN ONTARIO BY FREQUENCY OF OCCURRENCE : CAUSE: MALIGNANT NEOPLASMS		LAUSE LAUSE	002 MALIGNANT NEOPLASM OF TREACHEA		MALIGNANT			005 OTHER NEOPLASMS			** NOTE: SOME SUPPL, CAUSES MAY NOT B	
FREGUENCY	22014	5283 2844 2408	2286	1131	878	629	565	422	408	352	281		04.47
	DISEASES OF THE HEART MALIGNANT NEOPLASMS	CEREBROVASCULAR DISEASE ACCIDENTS PNFIMONIA & INFLUENZA	DISEASES OF THE ARTERIES, ETC.	SUICIDE & SELF-INFLICTED INJ.	CHRONIC LIVER DISEASES	BRONCHITIS, EMPHYSEMA, ASTHMA	CONGENITAL ANOMALIES	HYPERTENSION	PERINATAL CONDITIONS	NEUROTIC DISORDERS	PEPTIC ULCERS		OTHER CAUSES
CAUSE	001	900	200	000	600	010	011	013	012	014	015		910

THE LEADING SUPPL. CAUSES OF DEATH IN ONTARIO BY FREQUENCY OF OCCURRENCE : 1986

CAUSE: DISEASES OF THE WEART

= OCCURRENCE : 1986				
RIO BY FREQUENCY OF		FREQUENCY	1083 130 39 99	1488
THE LEADING SUPPL. CAUSES OF DEATH IN ONTARIO BY FREQUENCY OF OCCURRENCE : 1986	CAUSE: ACCIDENTS	SUPPL	001 MOTOR VEH. TRAFFIC ACCIDENT 005 FIRE AND FLAMES 004 OTHER TRANSPORT ACCIDENT 002 MOTOR VEH.NON-TRAFFIC ACCIDENT 003 OTHER ROAD VEHICLE ACCIDENT	006 OTHER INJURY/MISFORTUNE
FREQUENCY	9772	9323	2132	
	ACUTE MYOCARDIAL INFARCTION	OTHER ISCHAEMIC HEART DISEASE HEART FAILURE	ОТНЕК НЕАЯТ	
SUPPL	100	0002	400	

Source: Ontario Ministry of Health, Information & Systems Division. Information Resources & Services Branch

Exhibit 3.4

THE 15 LEADING CAUSES OF DEATH IN ONTARIO BY POTENTIAL YEARS OF LIFE LOST : 1986

	L YEARS OF LIFE LOST : 1986					TO THE SYEARS BEING ZERO
	O BY POTENTIA		* YEARS	63823.4 34623.0 22669.6	153196.8	BE LISTED DUE
	THE LEADING SUPPL. CAUSES OF DEATH IN ONTARIO BY POTENTIAL YEARS OF LIFE LOST : 1986	CAUSE: MALIGNANT NEOPLASMS	SUPPL	002 MALIGNANT NEOPLASM OF TREACHEA 003 MALIGNANT NEOPLASM OF BREAST 001 MALIGNANT NEOPLASM OF COLON	005 OTHER NEOPLASHS	** NOTE: SOME SUPPL. CAUSES MAY NOT BE LISTED DUE TO THE \$YEARS BEING ZERO
# TEARS	274315.2 252460.8 85251.0	54017.8 38531.8	31890.5 30620.0 22757.4 20694.3	16845.1 16637.2 9436.3 6055.1	4388.9	147282.4
CAUSE	002 MALIGNANT NEOPLASMS 001 DISEASES OF THE HEART 004 ACCIDENTS	003 CEREBROVASCULAR DISEASE 007 SUICIDE & SELF-INFLICTED INJ.		009 CHRONIC LIVER DISEASES 009 CHRONIC LIVER DISEASES 000 DIAGNETIS, EMPHYSEMA, ASTHMA 010 BRONCHIIS, EMPHYSEMA, ASTHMA 014 NEUROTIC DISORDERS		016 OTHER CAUSES

THE LEADING SUPPL. CAUSES OF DEATH IN ONTARIO BY POTENTIAL YEARS OF LIFE LOST : 1986

CAUSE: DISEASES OF THE HEART

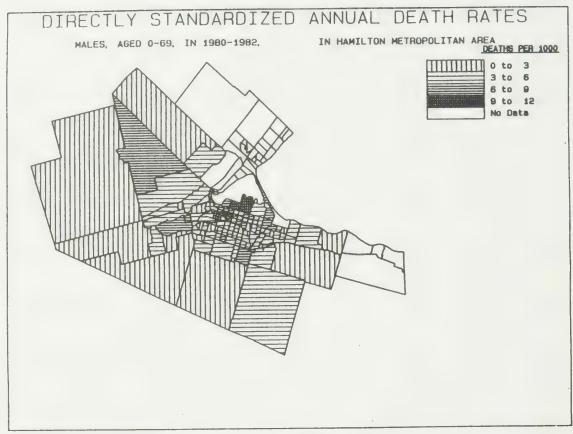
THE LEADING SUPPL. CAUSES OF DEATH IN CHTARIC BY POTENTIAL YEARS OF LIFE LOST ! 1964	CAUSE: ACCIDENTS SUPPL CAUSE CAUSE	001 MOTOR VEM. TRAFFIC ACCIDENT 44317.0 005 FIRE AND FLAMES 006 OTHER TRANSPORT ACCIDENT 3013.3 002 MOTOR VEM.MON-TRAFFIC ACCIDENT 1606.6 003 OTHER ROAD VEHICLE ACCIDENT 201.4	DOG OTHER INJURYALISEORTIME 30081.8
# YEARS	123044.8 93253.5 6395.2	29763.7	
	ACUTE MYOCARDIAL INFARCTION OTHER ISCHAEMIC HEART DISEASE HEART FAILURE	HEART	
– WI	ACUTE OTHER HEART	OTHER HEART	
SUPPL	0002	900	

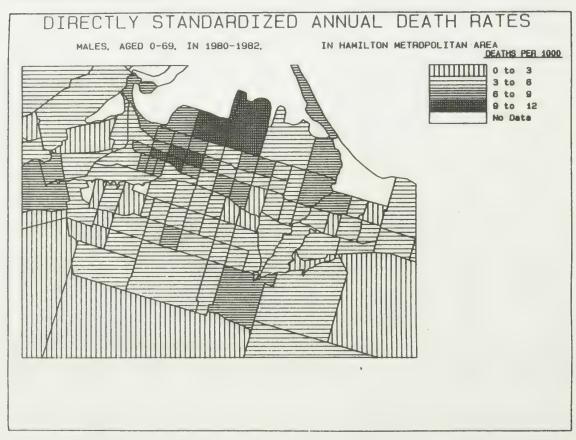
Source: Ontario Ministry of Health, Information & Systems Division, Information Resources & Services Branch

LEADING SUPPLEMENTARY CAUSES OF DEATH IN ONTARIO IN 1986 INDICATOR I - MORTALITY RATES

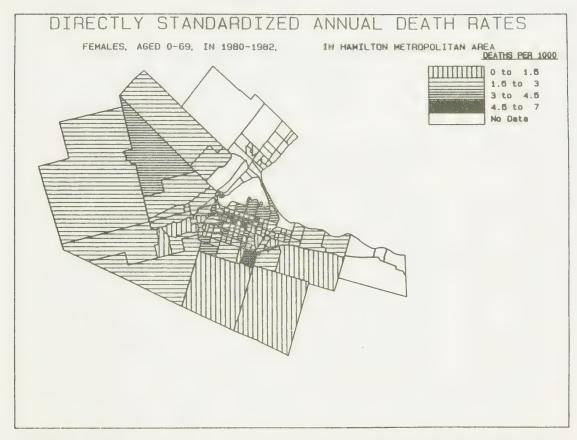
0 0 0 2	900		1488 .16 .16	816 .18	.15	268 .15	132	12.00	.16	38	31 . 14 13	
1 1 1 1 1	003		000	900.	£ 000.	000.	H 000.	000.	000.	000.	000	s 1&2)
ACCIDENTS	005		6 0 0 0 ·	10.	M 000.	000.	10.	0000	00.	.00.	000.	urces Report
ACCI	900		.01	.02	.000	10.	.02	000	.01	.01	000.	n Reso 80614,
1	900		130	.02	.01	.02	.02	6 .01	.03	6 0.	.01	Information Resources ect JCPA 880614, Repo
	001		1083	740	343	206 .12 .12	141 .16 .16	.07	34.	.12	90.	n, Info roject
	005		9801 1.08 1.08	5584 1.25 1.25	4217 .91	1911 1.08 1.06	1.25	925 . 92 . 90	509 1.20 1.09	282 1.37 1.24	227 1.05 .95	Division, Infoieval Project
ASMS	000		000.	000.	000.	000	0000	000	000.	000.	00°.	Retr
NT NEOPLASMS	001		1640 .18	819 .18 .18	821 .18 .18	310	162 .19 .18	148	64 .15	26 .13 .11	38 .18 .16	Se Treat
MALIGNANT	003		1700	8 00.	1692	333	00.	332	.19	.000	79	Information from Inform
	200		4223	2967	1256	845.	589.	.29	233 .55	170	. 29	th, Infiled fr
RT	500		2132 .23	1073 .24 .24	.23	423. 23.	194	229	103	48 .23 .21	. 25	f Health, (compiled
THE HEA	003		787.09.09	330	.10	133	51.	.09	37.09	.06	.12	stry o
DISEASES OF	000		9323 1.02 1.02	4707 1.05 1.05	4616 1.00 1.00	2283 1.30 1.25	1192	1091	679 1.60 1.44	353 1.71 1.54	326 1.50 1.33	Ontario Ministry o & Services Branch
DIS	001		9772 1.07 1.07	5813 1.30	3959 .85	1779	1.21	734	410 .97 .87	246 1.19 1.08	164 .76 .67	Ontar & Ser
		QUANTITY	OF ONTARIO NUMBER RATE STD.RATE SIGN	NUMBER RATE STD.RATE SIGN	NUMBER RATE STD.RATE SIGN	NUMBER RATE STD.RATE SIGN	NUMBER RATE STD.RATE SIGN	NUMBER RATE STD.RATE SIGN	HAMILTON-WENTWORTH, REG. MUN. OF TOTAL NUMBER RATE STD. RATE SIGN	NUMBER RATE STD.RATE SIGN	NUMBER RATE STD.RATE SIGN	Source:
	SUPPL. CAUSES :	ON	- PROVINCE TOTAL	MALE	FEMALE	CENTRAL MEST TOTAL	MALE	FEMALE	HAMILTON-WENTW TOTAL	MALE	FEMALE	
	SUPP	REGION	TOTAL			5			•			

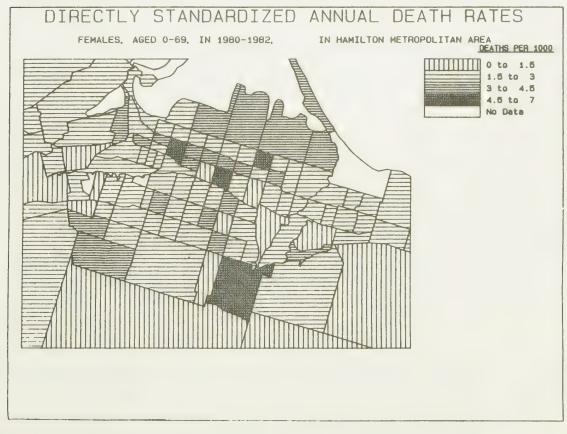
[Please refer to the preceding page for code labels]





Source: Liaw, K-L; Wort, S.; Hayes, M.V. 1987. <u>Intraurban variation in premature deaths and income inequality: a case study of Hamilton-Wentworth county</u>. McMaster University: QSEP Research Report No. 206. (Tables 6A 6B)





Source: Liaw, K-L; Wort, S.; Hayes, M.V. 1987. Intraurban variation in premature deaths and income inequality: a case study of Hamilton-Wentworth county. McMaster University: QSEP Research Report No. 206. (Tables 5A, 5B)

Exhibit 3.8

MORTALITY BY AGE GROUP AND CAUSE HAMILTON-WENTWORTH MALES 1986

											S.H.R.	95X LONER
AGE (IN YEARS):	UHDS	R 1 YEAR	1 - 14	15 - 24	25 - 44	45 - 64	65 - 74	75 - 64	85+	TOTAL	3.RATE	UPPER
PERIALITY CAUSE												
ALL INFECTIOUS DISEASES	DEATHS: RATE:	0.35	0.00	0.00	0.00	0.11	3 0.21	0.51	0.82	13 0.06	1.43	0.761 2.445
ALL HEOPLASHS	DEATHS: RATE:	0.00	0.00	0.09	19 0.30	153 3.44	140 9.96	128 21.64	35 28.69	476 2.32	1.01	0.924 1.104
ALL ENDOCRINE, METAL, NUT., + INM.	DEATHS: RATE:	0.35	0.00	0.00	0.00	11 0.25	8 0.57	7 1.18	4.92	33 0.16	0.72 0.15	0.502 1.001
ALL BLOOD DISEASES + B.V.	DEATHS: RATE:	0.00	0.00	0.00	9.03	11 0.25	21 1.49	18 3.04	15 12.30	67 0.32	1.02	0.001
MENTAL DISCRIDERS	DEATHS: RATE:	0.00	0.00	0.00	0.02	0.07	0.07	3 0.51	2 1.64	10 0.05	0.52	0.250 0.757
ALL N.S. & SENSE ORGANS	DEATHS: RATE:	0.00	0.00	3 0.09	0.02	7 0.16	14 1.00	10 1.69	4 3.28	39 0.19	1.09	0.776 1.402
ISCHAENIC HEART DISEASES	DEATHS: RATE:	0.00	0.00	0.00	12 0.19	136 3.05	201 14.31	163 27.56	85 69.67	597 2.89	1.13	1.042
ALL OTHER HEART DISEASES	DEATHS: RATE:	0.00	0.03	0.03	0.00	8 0.18	19 1.35	21 3.55	15 12.30	65 0.32	0.81	0.624 1.053
CEREBROVASCULAR DISEASES	DEATHS: RATE:	0.00	0.00	0.00	0.02	15 0.34	32 8.28	30 5.07	21 17.21	99 0.48 .	0.92	0.753 1.122
RESPIRATORY DISEASES	DEATHS: RATE:	0.35	0.00	0.03	0.06	21 0.47	29 2.06	56 9.47	33 27.05	145 0.70	0.95	0.802
ALL GASTROINTESTINAL DISEASES	DEATHS: RATE:	0.00	0.00	0.00	0.05	29 0.65	21 1.49	17 2.87	12 9.64	82 9.40	1.23	0.962 1.537
ALL GEHITOURINARY DISEASES	DEATHS: RATE:	0.00	0.00	0.00	0.00	0.11	0.36	13 2.20	8 6.56	31 0.15	1.20	8.610 1.716
DISEASES OF SKIN/MUSKULOSKELETAL	DEATHS: RATE:	0.00	0.00	0.00	0.00	0.00	0.07	3 0.51	0.00	0.02	08.0 20.0	8.218
CONG. ANOMALIES/PERIMATAL CONDITION	DEATHS: RATE:	4.85	0.03	0.06	0.00	0.00	0.00	0.00	0.00	17 0.08	0.77	0.449 1.232
ILL DEFINED SYMPTOMS, CONDITIONS	DEATHS: RATE:	1.04	0.00	0.03	0.05	11 9.25	0.20	3 0.51	2 1.64	27 0.13	0.94	0.619 1.372
MUTOR VEHICLE ACCIDENTS	DEATHS: RATE:	0.00	0.00	14 0.40	0.06	0.09	0.00	0.00	0.00	25 0.12	0.70 0.12	0.453 1.036
ALL OTHER ACCIDENTS	DEATHS: RATE:	0.00	6 0.15	0.12	12 0.19	9.11	10 0.71	1.01	5 4.10	48 0.23	1.01	0.749
SUICIDE	DEATHS: RATE:	0.00	0.00	0.12	21 0.33	0.16	8.14	0.34	0.82	36 0.16	0.95 0.18	0.676 1.292
ALL OTHER VIOLENT DEATHS	DEATHS: RATE:	0.00	0.00	0.09	0.02	3 0.07	0.14	0.17	0.00	10 0.05	1.74	0.635 3.202
TOTAL	DEATHS:	6.93	11	36 1.04	1.32	435 9.77	513 34.51	484	245 26.003	1828	1.02	0.950 1.005

Jource: Alder R. and Eastridge L. 1988. Morbidity and mortality statistics,
Hamilton-Wentworth, 1981 & 1986. Toronto: Ontario Ministry of Health.

NOTE: Please refer to the notes at the beginning of this chapter when consulting Exhibits 3.8-3.13

Also note that the above diagnostic categories are based on diagnostic chapters.

Exhibit 3.9

MORTALITY BY AGE GROUP AND CAUSE HAMILTON-WENTWORTH FEMALES 1986

										S.H.R.	95X
AGE (IM YEARS):	UNDER 1 YEAR	1 - 19	15 - 24	25 - 44	45 - 64	65 - 74	75 - 84	85+	TOTAL	S.RATE	LOHER
HORTALETY CAUSE											
ALL INVECTIONS DISEASES	DEATHS: 0.00		0.00	9.00	0.06	0.06	0.60	5 1.49	15 0.07	1.51	0.846
ALL REOPLASHS	DEATHS: 0.00	0.03	8	20 0.31	127 2.72	110 6.53	106 10.66	45 13.45	411	1.00	0.906
ALL ENDOCRINE, METAL, MUT., + INM.	DEATHS: 0		0.00	130.0	5 0.11	12 0.71	0.90	1.20	31 0.14	0.62	0.418
ALL BLOOD DISEASES + B.V.	DEATHS: 0.00	0.00	0.00	0.02	0.02	14 0.83	17 1.71	27 8.07	60 0.28	0.83	0.639
MENTAL DISCRDERS	DEATHS: 0 RATE: 0.00	-	0.00	0.00	0.00	0.06	0.10	1.20	0.03	0.26	0.095 0.567
ALL H.S. & SENSE ORGANS	DEATHS: 0.00		0.06	0.02	0.09	0.24	0.80	6 1.79	25 0.12	0.66	0.427
ISCHAENIC HEART DISEASES	DEATHS: 0		0.00	0.03	0.94	88 5.22	174 17.50	182 54.41	490 2.26	1.09	0.997
ALL OTHER HEART DISEASES	DEATHS: 0 RATE: 0.00	0.00	0.00	3 0.05	10 0.21	10 0.59	34 3.42	34 10.16	91 0.42	1.00	0.809
CEREBROVASCULAR DISEASES	DEATHS: 0.00	0.00	0.00	0.05	10 0.21	22 1.31	46	73 21.62	154 0.71	0.93	0.794
RESPIRATORY DISEASES	DEATHS: 2 RATE: 0.72		0.00	0.02	11 0.24	21 1.25	38 3.82	61 18.24	135 0.62	1.14	0.962 1.350
ALL GASTROINTESTINAL DISEASES	DEATHS: 0 RATE: 0.00	0.00	0.00	3 0.05	14 0.30	13 0.77	17 1.71	24 7.17	71 0.33	1.13	0.887 1.435
ALL GENITOURINARY DISEASES	DEATHS: 2 RATE: 0.72	0.00	9.00	0.00	0.09	0.53	12 1.21	2.69	36 0.17	1.47	1.025
DISEASES OF SKIN/HUSKULOSKELETAL	DEATHS: 0 RATE: 0.00	0.00	0.00	0.00	0.04	0.24	3 0.30	0.90	12	0.97	0.501
CONG. ANOMALIES/PERINATAL CONDITION	DEATHS: 12 RATE: 4.31	0.03	0.00	8 0.03	0.00	0.00	0.10	0.00	16 0.07	0.87	0.498
ILL DEFINED SYMPTOMS, CONDITIONS	DEATHS: 8 RATE: 2.87	0.03	0.00	0.03	8 0.17	2 0.12	5 0.50	0.60	29 0.13	1.04	0.697
HOTOR VEHICLE ACCIDENTS	DEATHS! 0.00	0.03	0.03	0.09	0.00	1 0.06	0.00	0.00	0.04	0.55	0.252
ALL OTHER ACCIDENTS	DEATHS: 0	0.03	0.00	3 0.05	0.09	0.36	05.0	17 5.08	33 0.15	0.88	0.613
SUICIDE	DEATHS: 0.00	0.00	2 0.06	e.03	0.09	0.18	0.00	0.00	0.05	0.83	0.414
ALL OTHER VIOLENT DEATHS	DEATHS: 0.00	0.00	0.06	0.05	0.00	0.00	0.00	0.00	5 0.02	1.43	0.463 3.332
TOTAL	DEATHS: 24 RATE: 8.62	0.16	9.26	53 0.61	251 8739	321 19.06	479 48.16	496 148.28	1640 7.55	1.00	0.939

Source: as per Exhibit 3.8
Notes: refer to Exhibit 3.8

Exhibit 3.10

MORTALITY BY AGE GROUP AND CAUSE HAMILTON-WENTWORTH 1986

											3.H.R.	95% LOHER
AGE (IN YEARS):	LANDE	R 1 YEAR	1 - 19	15 - 24	25 - 44	45 - 64	65 - 74	75 - 84	65+	TOTAL	3.RATE	UPPER
PERTALITY CAUSE												
ALL INVECTIOUS DISEASES	DEATHS: RATE:	0.18	0.00	0.00	0.00	0.09	0.13	9 0.57	1.31	28 0.07	1.47	0.978 2.131
ALL NEOPLASHS	DEATHS: RATE:	9.00	0.01	9.07	39 0.30	280 3.07	250 8.09	234 14.75	80 17.52	889 2.10	1.00	0.934 1.068
ALL ENDOCRINE, HETAL, NUT., + INN.	DEATHS: RATE:	0.18	0.00	0.00	0.01	16 0.18	20 0.65	1.01	10 2.19	64 0.15	0.67	0.516 0.871
ALL BLOOD DISEASES + B.V.	DEATHS: RATE:	0.00	0.00	0.00	30.0	12 0.13	35 1.13	35 2.21	9.20	127 0.30	0.92	0.766 1.104
HENTAL DISORDERS	DEATHS: RATE:	0.00	0.00	0.00	. 0.01	0.03	2 60.0	0.25	1.31	16 0.04	0.38	0.217
ALL M.S. & SENSE ORGANS	DEATHS: RATE:	0.00	0.00	9.07	20.02	0.12	18 0.58	18 1.13	2.19	64 0.15	0.87	1.131
ISCHAEHIC HEART DISEASES	DEATHS: RATE:	0.00	0.00	9.00	14 0.11	180 1.97	289 9.35	337 21.25	267 58.49	1087 2.57	1.11	1.101
ALL OTHER HEART DISEASES	DEATHS: RATE:	0.00	0.01	0.01	30.02	18 0.20	29 0.94	55 3.47	49 10.73	156 0.37	0.91	0.777 1.066
CEREBROVASCULAR DISEASES	DEATHS: RATE:	0.00	0.00	0.00	0.03	25 0.27	54 1.78	76 4.79	94 20.59	253 0.60	0.93 0.54	0.820 1.055
RESPIRATORY DISEASES	DEATHS: RATE:	0.53	0.01	0.01	9.04	32 0.35		94 5.93	94 20.59	280 0.66	1.02	0.910
ALL GASTROINTESTIMAL DISEASES	DEATHS: RATE:	0.00	0.00	9.00	6.05	43 0.47	34 1.10	34 2.14	36 7.89	153 0.36	1.18 0.33	1.000
ALL SENITOURINARY DISEASES	DEATHS! RATE:	e.35	0.00	0.00	8.00	9 0.10	14 0.45	25 1.58	17 3.72	67 0.16	1.33 0.14	1.044
DISEASES OF SKIN/HUSKULOSKELETAL	DEATHS: RATE:	0.00	0.00	0.00	0.00	3 30.0	5 0.16	6 9.38	3 0.66	16 0.04	0.93 0.03	0.532
COMB. ANOMALIES/PERIMATAL COMDITION	DEATHS: RATE:	26 4.59	8 0.03	8 0.03	3 30.0	0.00	0.00	8.06	0.00	33 8.08	0.81	0.545 1.126
ILL DEFINED SYMPTOMS, CONDITIONS	DEATHS! RATE:	11 1.94	0.01	0.01	8.04	19 0.21	6 0.19	0.50	0.88	56 0.13	0.99	0.762
HOTOR VEHICLE ACCIDENTS	DEATHS! RATE!	0.00	0.05	15 0.22	10 0.06	0.04	0.03	0.00	8.00	0.08	0.65	0.453
ALL OTHER ACCIDENTS	DEATHS: RATE:	0.00	5.07	9.06	0.12	0.10	16 0.52	8.50	22 4.82	0.19	0.95 0.18	8.758 1.187
anteros	DEATHS: RATE:	0.00	0.00	0.09	23 0.18	12 0.13	5 0.16	e 0.13	0.22	49 0.12	0.92 0.11	0.603 1.214
ALL OTHER VIOLENT DEATHS	DEATHS: RATE:	0.00	0.00	5 0.07	0.03	0.03	9.06	0.06	0.00	15 0.04	1.62	0.907 2.673
TOTAL	DEATHS: RATE:	44 7.76	17 0.22	45 0.65	137 1.06	686 7.53	834 26.99	963 60.72	741 162.32	3468 8.19	1.01 7.48	0.948 1.075

Source: as per Exhibit 3.8 Notes: refer to Exhibit 3.8

	CATEGORY	
11	DIAGNOSTIC	TH MAIRC
t 3,	AND	LIENTHODTH
Exhibit	GROUP	
	AGE	UAMITTON
	ΒY	VII
	MORBIDITY	

			Exhibit	33	.11							
MOR	MORBIDITY	2	GROUP TON-WE	P AND ENTWOR	Y AGE GROUP AND DIAGNOSTIC HAMILTON-WENTWORTH MALES	OSTIC	CATEGORY	ORY				
				1986							8. H.R.	45% LOWER
AGE (IN YEARS):	JOHN T	UNDER 1 YEAR	4-1	15 - 25	25 - 44	45 - 64	65 - 74	75 - 64	95+	TOTAL	S.RATE	UPPER
MORBIDITY CAUSE												
ALL INFECTIOUS DISEASES	SEPS. RATE:	40.57	5.22	1.16	1.05	40	1.14	32.41	6.56	526	2.60	1.137
ALL NEOPLASHS	SEPS. RATE	9.69	35	1.75	2.40	591 13.27	596 42.56	380	68.03	1903	0.91	0.954
-LUNG CANCER	SEPS.	8.00	0.00	9.00	0.14	126	124	9.13	5.74	320	1.42	1.009
- COLORECTAL CANCER	SEPS. RATE:	9.00	0.00	0.00	4 90.	3.26	3.49	36.09	9.84	157	0.75	0.640
- BREAST CANCER	SEPS. RATE:	0.00	9.00	0.00	0.00	0.00	0.00	0.51	0.00	0.01	1.17	3.416
ALL ENDOCRINE, METAL, NUT., + IMM.	SEPS. RATE:	1.39	24	33	1.11	101	5.62	9.13	18.03	366	1.60	0.661
- DIABETES HELLITUS	SEPS. RATE:	. 00	11 0.26	0.63	0.75	75	3.84	32	4.92	248	1.15	0.626
ALL BLOOD DISEASES + BV.	SEPS. RATE!	1.04	31.	1.67	115	310	230	108	29.77	884 4.28	4.04	1.047
ALL MENTAL DISORDERS	SEPS. RATE:	0.35	0.15	141	364	199	5.84	11.67	20.49	4.40	4.33	0.683
- NEUROSES	SEPS. RATE:	0.35	0.00	9.40	41.0	31	10	1.69	0.00	107	0.63	0.515
PERSONALITY DISORDERS	SEPS. RATE:	0.00	0.13	1.81	1.41	3.5	1.35	13	4.10	230	1.11	0.626
ALL N.S. & SENSE ORGANS	SEPS. RATE:	8.67	3.00	1.44	162	291	301	36.69	36.89	1210	5.56	0.854
CATARACTS	SEPS. RATE:	00.00	0.00	0 0	0.17	127	172	136	21.31	474 2.30	2.10	1.197
ACUTE MYDCARDIAL INFARCTION	SEPS. RATE:	00.0			78	303	192	109	13.93	3.27	3.03	1.153
OTHER ISCHAEMIC HEART	SEPS. RATE:	0 0	0 0		1.37	618	313	30.26	30.33	1234	5.55	1.043
ALL OTHER MEART DISEASES	SEPS.	1.39	0.03	9.36	1.10	277 6.00	222 15.00	166	56.56	636	3.76	0.708
CEREBROVASCULAR DISEASES	SEPS. RATE:	0 0 0	0.03	0.06	0.42	3.75	11.61	152	33.61	2.70	2.48	0.811
ALL RESPIRATORY DISEASES	SEPS. RATE:	160	19.63	176	3.17	280	19.50	251	63.93	2220	10.68	0.639
-ACUTE RESPIRATORY INFECTION	SEPS. RATE:	10.75	2.34	9.26	0.17	0.11	0.14	0.34	0.02	153	0.44	0.376
CHRONIC TONSILS & ADENOIDS	SEPS. RATE:	0.35	402	1.67	36	40.0	0.00	0.00	0.00	501	2.54	0.842
PNEUMONIA	SEPS. RATE:	10.06	2.42	0.40	29	1.66	30.	14.54	36.52	442	2.06	0.701
-ASTINIA	SEPS. RATE:	12.48	126	9.35	****	5.3	1.40	4 6	0.62	243	1.20	0.406

Source: Alder R. and Eastridge L. 1988. Morbidity an mortality statistics, Hamilton-

Wentworth, 1981 & 1986. Toronto: Ontario Ministry of Health.

Note: Please refer to the notes at the beginning of this chapter when consulting Exhibits 3.11-3.13

Figures are based on hospital separations for Hamilton-Wentworth residents, regardless of treatment site (compiled from HMRI database)

Exhibit 3.11 continued ...

Exhibit 3.12
MORBIDITY BY AGE GROUP AND DIAGNOSTIC CATEGORY
HAMILTON-WENTWORTH FEMALES
1986

											S.M.R.	256
AGE (IN YEARS):		UNDER 3 YEAR	1-14	15 - 26	25 - 44	19 - 55	65 - 7h	75 - 04	92+	TOTAL	S.RATE	UPPER
HORBIGITY CAUSE												
ALL INFECTIOUS DISEASES	SEPS. RATE:	29.00	177	1.77	1.10	1.01	1.04	3.12	5.08	517	2.41	1.049
ALL NEOPLASHS	SEPS. RATE:	1.00	36	1.86	382	14.67	460	29.06	26.31	2104	9.20	0.798
LUNG CANCER	SEPS. RATE:	• 0	0 0 0	• •	6.05	1.14	1.64	20 20 20 10 20	3.20	111	0.69	0.575
COLORECTAL CANCER	SEPS. RATE:	0 0 0	0.00	0.00	0.05	1.31	3.09	4.02	5.08	173	0.90	1.044
BREAST CANCER	SEPS. RATE:	.00	0.00	0.00	e. 75.	3.67	4.67	4.32	4.19	359	0.95	1.056
ALL ENDOCRINE, METAL, NUT., + IPM.	SEPS. RATE:	1.00	31 0.05	0.70	124	125	91	9.65	13.15	538	0.72	0.659
- DIABETES MELLITUS '	SEPS. RATE:	0.00	21 8.56	0.49	\$5	3.24	\$ 13	3.92	2.69	232	1.03	0.494
ALL BLOOD DISEASES + BV.	SEPS. RATE:	1.00	9.69	0.72	2.16	246	154	12.27	18.63	3.59	3.41	0.867
ALL MENTAL DISORDERS	SEPS.	0.36	17	3.22	315	5.00	127	117	13.75	971	0.63	0.592
NEUROSES	SEPS. RATE:	00.0	0.19	16	55	1.35	1.04	1.91	. 90 . 90	196	0.56	0.486
PERSONALITY DISORDERS	SEPS. RATE:	9.36	0.21	1.00	106	11.14	39.1	2.23	1.20	284	1.30	0.562
ALL N.S. & SENSE ORGANS	SEPS.	8.26	2.63	1.45	2.60	7.34	367	362	31.69	1524	0.92	0.864
CATARACTS	SEPS. RATE:	0.00	. 0 M N	0.03	0.14	2.66	254	266 26 . 75	26.01	743	3.10	1.012
ACUTE HYDCARDIAL INFARCTION	SEPS.				.0	3.4.	110	12.17	40	345	0.95	1.056
OTHER ISCHAENTE HEART	SEPS.			•	9.26	5.15	233	21.92	74 22.12	3.61	3.30	0.665
ALL OTHER MEART DISEASES	SEPS. RATE:		9.13	•.17	0.73	1,78 18,78	202	31.17	140	4.12	3.75	0.721
CEREDROVASCULAR DISEASES	SEPS. RATE:	6.36	0.03	9.00	22 47.	1.62	130	189	31.69	536	2.24	0.769
ALL RESPIRATORY DISEASES	SEPS.	101	698	241	3.39	4.70	228	186	31.09	1999	9.17	0.667
ACUTE RESPIRATORY INFECTION	SEPS. RATE:	15	1.12	0.32	12 0.16	0.17	0.12	0.30	1.49	98	0.39	0.476
CHRONIC TONSILS & ADENDIOS	SEPS. RATE:	0.36	453	142	0.73	0.04	0.06	000	0.00	2.98	3.12	0.950
	SEPS.	5.39	1.76	9.50	33.	1.27	70	10 10 10 10 10 10	62 18.54	375	0.73	0.656
- ASTHEA	SEPS. RATE:	4.67	2.42	22	33	#E	22	12.1	0.30	255	1.19	0.432

Source: as per Exhibit 3.11 Notes: as per Exhibit 3.11 PSX LOVER UPPER 0.826

0.930

0.590

0.414

1.024

1.117

0.003

1.016

0.453

0.770

0.038

0.665

1.002

0.796

1.161

Exhibit 3.12 continued ...

Exhibit 3.13

MORBIDITY BY AGE GROUP AND DIAGNOSTIC CATEGORY HAMILTON-WENTWORTH 1986

											. H. H.	25%
AGE (IN YEARS):	3	UNDER 1 YEAR	1 - 10	15 - 25	25 - 44	49 - 56	42 - 34	75 - 84	95+	TOTAL	S.RATE	CENTRAL
MORBIDITY CAUSE												
ALL INFECTIOUS DISEASES	SEPS. RATE	34.93	362	102	139	0.95	1.52	3.97	5.48	1043	1.00	1.064
ALL HOPLASHS	SEPS. RATE:	1.23	73	126	535	1366	1058 34.25	669	37.46	4007	0.00	0.626
- LUNG CANCER	SEPS. RATE:	. 0	• •	• 0	12 0.09	179	155	4.67 4.67	2.41	431	2.00	0.765
COLORECTAL CANCER	SEPS. RATE:	0.00	. 0	0.00	7 0.05	117	3.27	4.79	29	330	0.02	0.737
- BREAST CANCER	SEPS. RATE:		0.00	. 0	0.30	171	2.65	2.90	3.07	362	0.95	0.854
ALL ENDOCRINE, METAL, MUT., + IMM.	SEPS.	1.23	55	9.02	195	226	370	150	66 14.46	926	2.09	0.683
-DIABETES HELLITUS,	SEPS. RATE:		32 0.42	0.56	92	133	3.17	K 3	3.29	480	1.08	0.567
ALL BLOOD DISEASES + BV.	SEPS.	1.06	6.74	1.20	256	556 6.10	364	230	92 20.15	3.93	3.72	1.021
ALL MENTAL DISORDERS	SEPS. RATE:	0.35	0.30	3.64	5.41	436	210	186	71 15.55	1679	6.96	0.724
MEUROSES	SEPS. RATE:	0.16	0.09	N 3.	8 7.	1.03	1.33	1.63	9.66	303	0.58	0.517
- PERSONALITY DISORDERS	SEPS. RATE:	0.16	113	125	196	9.97	1.52	2.21	1.97	514	1.20	0.613
ALL M.S. & SENSE ORGANS	SEPS. RATE:	6.47	217	1.44	337	633	668	579	151	2734 6.46	6.09	0.054
CATARACTS	SEPS. RATE:	0.00	0.03	0.01	20	251	426	404	24.75	1217	1.09	1.624
ACUTE HYDCARDIAL INFARCTION	SEPS. RATE:	0	000	. 0	9 4 .	371	302	230	12.49	1020	1.03	1.0%
OTHER ISCHAENIC HEART	SEPS. RATE:	0	0.01	• •	104	9.41	546 17.67	397	24.32	2017	6.39	1.032
ALL OTHER HEART DISEASES	SEPS. RATE:	6.7	0.00	1.0	0.91 0.91	35	13.72	31.48	47.54	1732	3.75	0.019
CEREBROVASCULAR DISEASES	SEPS. RATE:	0.18	0.0 W W	0.00	0.30	252	9.56	341	32.20	1093	2.35	0.808
AL: RESPIRATORY DISEASES	SEPS. RATE:	261	1477	417	424	499	502 16.25	437	182	4219	9.69	0.657
-ACUTE RESPIRATORY INFECTION	SEPS. RATE:	9.11	1.74	0.29	£3 0.10	13	0.13	9.32.55	1.31	251 0.59	0.42	0.370
_ CHRONIC TONSILS & ADENDIDS	SEPS. RATE:	e . 35	11.12	2.00	0.65	0.07	0.03	0.00	0.00	2.71	2.63	1.043
- PNEUMDNIA	SEPS.	7.76	162	6.33	6.7 9.52	133	136	141	109	1.93	1.65	0.699
ASTIMA	SEPS.	::	217	* :	9.4.		1.82	1.01		496	1.19	0.439

Source: as per Exhibit 3.11
Notes: as per Exhibit 3.11

Exhibit 3.14

ACUTE CARE SEPARATIONS, HAMILTON-WENTWORTH BY AGE GROUP AND GENDER (ALL DIAGNOSTIC CHAPTERS) 1986 - 1987

		HAHILT	ON-WENT	THORTH	*			H	MILTON	i			 	DUND	AS			******	
	i	A	SE		1			A	SE		1		 	AG	E				
	00 TO	15 TO 44	45 TO 64	65 TO	I I TOTAL	(†)	NEWB-	00 TO 14 YEARS	15 TO	45 TO	65 TO	TOTAL		NEWB-	14 YEARS	15 TO	45 TO 64 YEARS	65 TO 99 YEARS	TOTAL
	CASES	CASES	CASES	CASES			CASES	CASES	CASES	CASES	CASES	CASES	CASES	CASES	CASES	CASES	CASES		
ISEX IMALE		3	7	3	16	3							1						1
FEHALE		1 4	3	1	9	. 1	2163	1720	11796	4260	6521	26460	1	165	67	650	248	522	1653
TOTAL	4		+	+				}	}	·			1 8			} (+)·	

			STO	EY CRI	EK		(ANCAS	TER					FLAMBO	ROUGH		1
			AG	E		1				4.00			i i			AGE			
		NEWB-	00 TO	15 TO 44 YEARS	45 TO 64 YEARS	65 TO	TOTAL	NEWB-	14 YEARS	44 YEARS	64 YEARS	99 YEARS	TOTAL	NEHB-I	00 TO	15 TO	45 TO	65 TO	TOTAL
			CASES	CASES	CASES	CASES	CASES	CASES	CASES	CASES	CASES	CASES	CASES	CASES				CASES	CASES
ISEX .		!																	
HALE		343	295	527	564	640	2369	132	79	164	202	223	800	142	118	219	213	210	902
FEHALE	1	324	236	1566	532	587	3246	115	70	496	157	182	1020	130	101	652	199	187	1269
TOTAL	1		531	2093		1227	5615	247	149	660	359	405							2171
00000000																			
				BROOK				ОТІ								TOTAL			
	i i		AGE					A					, + 1		A(
			AbE	145 70	145 70			I A TO	116 70	AE TO	IAE TO				loo To	11E TO	IAS TO	145 70	
	ORN	YEARS	YEARS	YEARS	YEARS	TOTAL	ORN	YEARS	YEARS	YEARS	YEARS	TOTAL		ORN	YEARS	44 YEARS	64 IYEARS	99 YEARS	TOTAL
													CASES			CASES	CASES	CASES	CASES
ISEX																1			
MALE !	67	52	108	128					 		+	+	+			+	+	+	25501
FEMALE	61		283	111					27				+			+	+		34302
ITOTAL	128	86	391	239	207	1051	12	5	41		1 19		6		4986	121182	111968	115594	59803

^{*} specific municipality not known

Note: where age groups and geographic boundaries coincide, rates can be calculated using information contained in the Demographics section for the purposes of comparison

Source: Ontario Ministry of Health, Information Resources and Services Branch

[†] age unknown or over 100

Exhibit 3.15
ONTARIO HOME CARE PROGRAM
NUMBER OF ADMISSIONS

- 1986

GNOSTIC CATEGORIES: (1) After Care	(1) After Care	(7) Diseases of Blood and	(13) Ischaemic Heart Disease	(19) Diseases of the Skin and
	(2) Infectious and Parasitic	Blood Forming Organs	(14) Cerebrovascular Disease	(20) Diseases of Musculskeletal
	Diseases incl. Tuberculosis	(8) Mental Disorders	(15) Diseases of the Respira-	System & Conn. Tissue
	(3) Neoplasm (malignant/Benign) (9) Diseases of the Nervous	(9) Diseases of the Nervous	tory System	(incl. arthritis)
A = acute	excluding (4)	System including Multiple	(16) Diseases of Digestive	(21) Fractures, Injury and
C = chronic	(4) Malignant Neoplasm of	Sclerosis & Parkinson's	System	Poisoning excluding (22)
	Digest. Organ & Peritoneum	Disease	(17) Diseases of Genitourinary (22) Fractured Femur	(22) Fractured Femur
	(5) Endocrine Nutritional & ((10) Disorders of Sense Organs	System	(23) Surgical/Medical Compli-
	Metabolic Disease excl.(6)	excluding (11)	(18) Complication of Pregnancy,	cations (Wound Disruption)
	(6) Diabetes Mellitus ((11) Cataract	Child Birth & Puerperium	(24) Other Diagnostic Categories
		12) Disease of the Circulatory		
		Cyetom eyel (17) P. (14)		

DIAGNO

× O

Compiled from: Ontario Home Care Administration, Ministry of Health, Ontario Home Care Program 1985-86 Annual Report

Exhibit 3.16

HOME CARE PROGRAM - HAMILTON-WENTWORTH -

ADMISSIONS BY PRIMARY DIAGNOSTIC CATEGORY

April 1987 - March 1988

	Acute	Program	Chronic	Program	Total	Home Care
Diagnostic Category	#	%	#	<u>%</u>	#	%
Trauma	1036	19.05	315	7.17	1351	13.74
Musculo-skeletal	480	8.83	663	15.09	1143	11.63
Infections	35	0.64	22	0.50	57	0.58
Cancers	595	10.94	639	14.54	1234	12.55
Endocrine/Metabolic Disorders	274	5.04	196	4.46	470	4.78
Blood Diseases	15	0.28	24	0.55	39	0.40
Behavioural/Psych.	74	1.36	230	5.23	304	3.09
Nervous System	174	3.20	479	10.90	653	6.64
Eye and Ear	61	1.12	25	0.57	86	0.88
Circulatory Diseases (heart & blood vessel)	486	8.94	909	20.69	1395	14.19
Respiratory	180	3.31	253	5.76	433	4.40
Oral/Gastrointestinal	290	5.33	76	1.73	366	3.72
Renal	62	1.14	143	3.25	205	2.09
Reproductive	180	3.31	12	0.27	192	1.95
Skin	631	11.60	154	3.51	785	7.98
Other	865	15.91	254	5.78	1119	11.38
TOTAL	5438	100.00	4394	100.00	9832	100.00

Compiled from: Ontario Ministry of Health, Ontario Home Care Administration System, run on Analysis of Admissions by Diagnosis and Condition.

AGE-SEX DISTRIBUTION TOTAL ENROLMENT

	TOTAL	ж	5.4	5.5	5.3	9.9	6.6	11.1	8.5	6.9	6.5	5.4	7.7	6.4	6.1	4.7	3.5	2.3	1.4	1.5	100.0
	10	14:	209	212	207	256	385	430	330	266	253	208	171	191	235	180	134	06	2 6	57	3870
		ik.	102	9.1	9 8	136	192	173	140	127	144	26	76	105	126	91	7.7	20	36	43	1922
		3 6	2.6	5.4	2.5	3.5	5.0	4.5	3.6	3.3	3.7	2.5	5.4	2.7	3.3	5.4	2.0	1.3	6.0	1.1	49.7
JULY 1987	MALE FEMALE	9876543210123456789	THE WAXAAA	LLLLL XXXXX	THEFT EXECUTE	THEFT WEWER	THEFTELS MEMBERS	MAMMAMAMAMAMAMAMAMAMAMAMAMAMAMAMAMAMAM	LULLUL MEMBERSE	THEFT MEMBERS	THEFT NEWSTER	MAMMAM TITIL	THAIL MEMB	THEFT MEET	THE HELD WENTER	LLLL MEETE	AAA WWW	FFF MM	ELE W	E E	
		34	2.8	3.1	2.8	3.1	5.0	9.9	6.4	3.6	2.8	5.9	2.0	2.2	2.8	2.3	1.5	1.0	0.5	7.0	50.3
		¥£	107	121	109	120	193	257	190	139	109	111	7.7	98	109	89	5.7	7 0	2.0	14	1948
	AGE	GROUP	7-0	6-5	10-14	15-19	20-24	25-29	30-34	35-39	75-05	69-55	50-54	55-59	99-09	69-59	70-74	75-79	80-84	85+	TOTAL

University Teaching Health Unit (with the help of Drs. Stephenson and Henderson General Hospital, Department of Family Medicine, McMaster MacDonald; Carol Profetto and Kim Clark). Source:

NENDERSON HEALTH SERVICE ORGANIZATION 20 MOST COMMON DIAGNOSES BY NUMBER OF PATIENTS 1987

Rank	# Patients	Diagnosis
1	599	Advice & health instruction
2	548	Acute URI (including pharyngitis)
3	503	Medical examination
4	372	Hypertension (uncomplicated)
5	369	Anxiety
6	344	Immunization
7	256	Sprain & strain all other sites nec
8	227	Abdominal pain
9	211	Back pain without radiation
10	202	Pain in Joint
11	180	Osteoarthrosis (osteoarthritis) & allied conditions
12	178	Pain in limb
13	168	Transient situational disturbance, acute stress
		reaction, adjustment reaction
14	168	Laceration, open wound, trauma, amputation
15	158	Acute otitis media
16	154	Cough
17	147	Fatigue, malaise, tiredness
18	143	Bronchitis & bronchiolitis, acute
19	138	Obesity
20	136	Eczema & allergic dermatitis
Note:	a patient is co	unted as often as s/he has a distinct diagnosis

NENDERSON HEALTH SERVICE ORGANIZATION
20 MOST COMMON DIAGNOSES BY NUMBER OF ENCOUNTERS

Exhibit 3.19

		1987
Rank	# Encounters	Diagnosis
1	1086	Hypertension (uncomplicated)
2	803	Advice & health instruction
3	790	Medical examination
4	748	Acute URI (including pharyngitis)
5	686	Anxiety
6	639	Heart failure
7	587	Diabetes
8	587	Osteoarthrosis (osteoarthritis) & allied conditions
9	539	Other cerebrovascular disease
10	505	Senile dementia
11	422	Prenatal care
12	393	Immunization
13	384	Sprain & strain all other sites nec
14	370	Back pain without radiation
15	359	Chronic ischaemic/angina
16	359	Abdominal pain
17	343	Transient situational disturbance, acute stress
		reaction, adjustment reaction
18	320	Obesity
19	311	Depression
20	297	Acute otitis media
Note:	a patient is coun	ted as often as s/he visits for service

Source: Henderson General Hospital, Department of Family Medicine, McMaster University Teaching Health Unit (with the help of Drs. Stephenson and MacDonald; Carol Profetto and Kim Clark).

Exhibit 3.20

NEW CANCER CASES

REGISTERED BY SITE OF DISEASE AND TREATMENT CENTRE, 1986

	н /	AMILTON	0	NTARIO
SITE OF DISEASE (ICD9)	#	%	#	x
*140 Lip	6	0.2	 79	0.4
*141 Tongue	22		180	
142-145 Rest of Mouth	44		322	
		1.1		
	42	1.3		
152,153 Intestine except Rectum		3.6		
		3.7		
155-159 Other Digestive System			325	
*160 Nose, Middle Ear, Acessory Sinuses	s 10	0.3		0.3
*161 Larynx	48	1.5		
*162 Lung, Bronchus, Trachea	481		3237	16.0
163-165 Other Respiratory	9	0.3	60	0.3
*170 Bone	7	0.2	66	0.3
*172 Malignant Melanoma	104	3.2	583	2.9
*173 Other Cancer of Skin	306	9.4	1977	9.7
	540	16.5	3567	17.6
*180 Cervix Uteri	68	2.1	467	2.3
179,181,182 Other Uterus	129	4.0	621	3.1
*183 Ovary Tubes and Ligament	82	2.5	436	2.1
*184 Other Female Genital Organs	20	0.6	113	0.6
*185 Prostate	151	4.6	971	4.8
*186 Testis	23	0.7	209	1.0
*187 Other Male Genital Organs	1	0.0	18	0.1
*188 Bladder	97	3.0	421	2.1
*189 Kidney and Other Urinary	40	1.2	268	1.3
191,192 Brain and Nervous System	79	2.4	477	2.4
*193 Thyroid Gland	10	0.3		
*200 Lymphosarcoma, Reticular Cell	43	1.3	452	2.2
Sarcoma				
*201 Hodgkin's Disease	40	1.2	277	1.4
*202 Other Lymphomas	97	3.0	390	1.9
204-208 Leukemia	87	2.7	475	2.3
RESIDUAL Other Sites	320	9.8	1360	6.7
TOTAL	3262	100.0	20295	100.0

^{*} Provisional; transitional period

Source: Ontario Cancer Treatment and Research Foundation. 1988.

Cancer in Ontario 1987: biological response modifiers.

(Table IX, p.195)

Preventive Primary Health Care

- sexually transmitted diseases - live births -abortions, stillbirths & infant deaths

Chapter 4

40 +

U/K

Exhibit 4.1

SEXUALLY TRANSMITTED DISEASES POSITIVE TEST RESULTS FOR 1987, HAMILTON-WENTWORTH*

ANNUAL REPORT JANUARY - DECEMBER H=Hale f=female POSITIVE HIV PPNS 60M. SYPH. CHLAM. HERPES AIDS SEROLOGY TEST F TOT. AGE M F TOT. F TOT. F TOT. F TOT. TOT. F TOT. 0-19 - 1 20-24 25-39

TOTAL 0 271

-11

reported from all sources (area hospitals, labs, physicians, STD and birth control clinics)

Regional Municipality of Hamilton-Wentworth, Department Source:

of Health Services

Contact: Arlene Stacie

Exhibit 4.2

LIVE BIRTHS, WENTWORTH COUNTY TENTATIVE MINISTRY DATA

1986

	,	larital	Birt	h Vei	ght	Gesta	tion		
		tatus	(g	rams)		Period	(weeks)	
mother's age	marrie NO.	dother		1500- 2500 MO.	2501+ NO.	20-27 NO.	28-34 NO.	35+ NO.	TOTAL NO.
13	1	0	0	0	1	0	0	1	1
14	2	0	0	0	2	0	0	2	2
15	8	0	0	0	8	0	0	8	8
16	31	4	0	1	34	0	1	34	35
17	48	6	1	6	47	0	1	53	54
18	69	26	0	7	88	0	0	95	95
19	57	57	1	10	103	0	4	110	114
20-24	296	1149	13	80	1352	6	30	1409	1445
25-29	128	2286	17	110	2287	8	34	2372	2414
30-34	57	1438	6	65	1424	3	13	1479	1495
35-39	12	377	8	26	355	3	10	376	389
40-44	2	31	3	0	30	1	1	31	33
45 +	0	1	0	0	1	0	0	1	1
1986 TOTAL	711	5375	49	305	5732	21	94	5971	6086
1985 TOTAL	690	5399	63	286	5739	30	133	5926	6089
1984 TOTAL	630	5299	52	322	5555	24	138	5767	5929

Source: Ontario Ministry of Health, Public Health Branch

INFANT MORTALITY FROM SELECTED CAUSES, ONTARIO, 1984

DNTARIO AND LOCAL I	LIVE BIRTHS (TOTAL	CONGENITAL		RESPIRAT. CONDITIONS	AT. I	SUDDEN		GROWTH DISORDERS	TH I	ACCIDE	NTS	ACCIDENTS INFECTIOUS ACCIDENTS IN PARASIT.	IT.	PNEUMONIA	DAIA	TRAUMA	 = \$	CAUSES	E S
BY REGION		DEATHS	(740-	759)	(768-770	770)	(7980)	s -	(764-766)	7663 1	E800-869,	69,1(DISEASES 001-139, 771)	19°	INFLUENZA (480-487)	687)	(767)			
			NO. R	ATE 1	NO.	RATEL	NO.	RATE	HO.	RATE	110. R	RATE	HO. R	RATE	NO.	RATE	¥0.	RATE	9	RATE
ONTARIO TOTAL	131,049	1,006	562	2.3	207	1.6	175	1.6	88	0.7	22	0.2	25	0.2	٠	-1.0	13	0.11	201	-
SOUTHWEST	19,203	150	45	2.2	30	1.61	22	1.1	14	17. 0	4	0.2	4	0.2	~	0.1	1	0.1	31	-
BRUCE	1,076	40	*	3.7	64	1.9	-	0.9											•	0
ELGIN-ST. THOMAS	066	•	-	_	-	1.01	N :			-						-			M	m
GREY-OHEN SOUND	1,024	4 «			P	10.1	→ 6	0.0	-	0.	-	 P	-	1.9				-	~	6
KENT	1.584	- M	4	10.	1 ~	1.3	ı m			-			•		~	1.3		-	· ~	-
LAHBTON	2,004	18	7		4	2.01	2		2	10.1		-		-		_		_	M	-
MIDDLESEX-LONDON	4,912	47	12		11	2.2	un e	9	m e	9:		N 9	-	0.2			-	0.2	e c	
OXFORD	1,273	13	m 	7.4	η.		N	0.7	NI =	0.	7	0							u -	-
PERTH	966	3 0	13	• 1	→ 6	0.0	4	0	¥	0 -	1	- 6		0.0					- 4	. 0
MINDSOK-ESSEX	11614	47	71		u	0	•		n			8	•	0						
						-						-						- ;	1	,
CENTRAL MEST	24,912	171	20	2.0	20	5	54	- -	17	0.7	•	0.2		0.0	N		N	0	23	-
BRANT	1,629	13	4	2.5	-	0.6		1.2		-				_	-	9.0		-	M	3.1
HALDIMAND-NORFOLK	1,379	14	4	0	~	1.5	4	2.9	N	5	e-100)	0.7						-	- 1	0
HALTON	3,582	57	4		N (9.0			N I	9.0									A 1	*
HAMWENTHORTH	5,929	2 -	<u> </u>	2.2	• :	10.1	n 4	0.0	- 0	2.1	-	- 6	-	y .	-	0			- ^	7 1
MIAGAKA WATEDIOO	5.017	104	16	3.2	1	1.4	•				• 64	4.0		-	•	-	N	0.4	lil)	9.0
WELLDUFFG.	2,644	18	4		•	2.3			m										ın	-
CENTOAL FAST	56.410	010	120	.6	10	1.4	90		0.4	0.7	4	- 1	10	0.2	N	0.0	IA.	0.1	79	-
						-		-		-								-	•	•
DURHAM	5,175	31	7 -	2.3	0 1	7.5	Ω <i>1</i>	0.1	→ #	2.0	-	12.0	-	7.0	-	v -			? <	, (
HAL., K., P.R.	1,691	91	n (n e	9.0		9.8	η,	9.4						~	-		* 0	3 0
PEEL	****	9 1	2 -	7.0	2 "		0 -	0.0									•	e	•	•
STHORE	3.259	20	• «)	0.3		- 15		9.0		-		-		-		_	7	N
HETRO TORONTO	29,930	244	74		53	1.8		-		0.0	m	0.11	4	0.1	-	0.0	4	0.1	65	-
EAST YORK	1,402	11	m	2.11	4	16.2		1 4.0		1 7.0		-		-		-			2	1.4
ETOBICOKE	3,943	25	1 0		4		2	m.	-	0.3		-	-			-	-		40	2.0
NORTH YORK	7,347	62	12		0		_	0		1.1		-	-	0.1		-	P ^A	4.0	13	, (jane
SCARBOROUGH	6,971	51	14		13	1.9	0	6.	7	0.1		- ;	N	0.3	=	0.1			0	1.1
TORONTO	8,268	90	27		8	2.2	-			o.o	m	3.0							4	5.4
YORK BOROUGH	6664	51	* :	2.01	a i	2.5	2 1	٠.					•			-		-	9 4	
ACON DECTORAL	270	200			4	2				9				17					•	

Ontario Ministry of Health, Community Health Programs Branch, Statistical Report on Community Health, Ontario, 1984. (Table 10.1) Source:

Gia Eisenstein (Executive Director, Community Health Programs Branch) Contact:

Exhibit 4.4
STILLBIRTHS
HAMILTON-WENTWORTH, 1987

	STAT	HARITAL STATUS	WEIGHT		GESTATION PERIOD	2 I OO	
	NOT HARRI-	OTHERS	WEIGHT CNK.	~	20-34	55 +	TOTAL
	2	9	.04	04	O	92	9
AGE							
16		0	H	0	F	•	H
19	0	2	2		0	~	~
20-24		0	•	M	2	M	
25-29		7	9			2	
30-34	0	10	10	E I		2	10
35-39	0	2	2		0		~
40-44	0			9		0	
TOTAL	N	30	33	11	T.	11	33

Exhibit 4.5

INFANT DEATHS, BY AGE AND SEX HAMILTON-WENTWORTH, 1986

	SEX	~	
	MALE I FEMALE	FEMALE	TOTAL
	NO. I NO. I NO.	9	NO.
AGE			
<7 DAYS		8.00	20
7-27 DAYS	1.00		
26 DAYS-1 YEAR 7.00	7.00	13.00	20
TOTAL 20.001 24.001 441	20.001	24.00	\$

Exhibit 4.6

THERAPEUTIC ABORTIONS: AGE BY MARITAL STATUS HAMILTON-WENTWORTH, 1987

1				ISINGLE	GLE	HA	MARRIED SE	SE	PARATE	SEPARATE DIVORCED MIDOMED CONTION	MIDOMED	COMMON	_	ROK
FEARS 15 I 16 I I I I I I I I I I I I I I I I I				H F		I		0 12	M			¥	19	2
YEARS 15 I 16 I I I I I I I I I I I I I I I I I	w	1	1		- 1				8 8				1	•
YEARS 15			14	H	•	н		Н		-	-	4 1	4 3	
YEARS 16	14 YEA	IRS		н -		н -		H		H	T	7	1 1	
YEARS 16			4	<u> </u>	16) -		н		н	н	н	H	16
YEARS 17		Say	1	н	1	ı H		-		н	н	H	н	1.2
YEARS 17				+	1	-+-	9	+-	1			9	+ 1	
YEARS 10			16	н	45)=d		н		н	H	I	!	94
YEARS 10		LRS.		н		Н		н		н	H -	н	H	ių.
YEARS 10			P	+ +	24	+ >		+ -	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		I	I	H	75
YEARS 19	17 YEA	'RS	/1	4 H	1	н н		н		ıн		н	H	5.6
19 I 76 I 2 I I I I I I I I I I I I I I I I I				+	1	+	-						+ 1	
20 I 357 I 64 I 25 I 5 I I I I I I I I I I I I I I I			18	н	76	H	64	н	H	н	н	+	H	90
20 I 357 I 64 I 25 I 5 I	18 YEA	LRS.	} 	н		н		н		н	н	H	H 1	6.2
20 I 357 I 64 I 25 I 5 I				+		+ 1		+ 1	9 9		 	4	>	107
20 I 357 I 64 I 25 I 5 I I I I I I I I I I I I I I I			10	н	0	н	-	–		- 1	-1 1	1 1	4 1-	
20 I 357 I 64 I 25 I 5 I I I I I I I I I I I I I I I	19 YEA	IRS		ы		н .		Η -				1	1 1	
21 I 146 I 91 I 36 I 11 I I I I I I I I I I I I I I I I I			00	-	467	+ -	44	1 1 +	25	15	Н	I 14	m	465
21 I 146 I 91 I 36 I 11 I I I I I I I I I I I I I I I I I	20-24	YEARS)	1 14		н		Н		м	н	н	H	36.9
21 I 146 I 91 I 36 I 11 I I I I I I I I I I I I I I I I I				+	0	+-		9	1			B B B	† 1	0
25 I 38 I 76 I 24 I 15 I 3 I I I I I I I I I I I I I I I I I			21	н	146	ы	16	ы			H	01 1	H 1	242
22 I 36 I 76 I 24 I 15 I 3 I 2 I 3 I 3 I 3 I 3 I 3 I 3 I 3 I 3	25-29			н -		H ·		H		1	H +	I	H +	22.1
23 I			6	-	5) }	76	1	24	15	м	64 H	Н	158
23 I 6 I 43 I 2 I 11 I I I I I I I I I I I I I I I	30-34		J	н	3	н		1-1-1		м	н	H	H	11.9
24 I 2 I 10 I 2 I I I I I I I I I I I I I I I I I			6	+ -	•	+ -	7.4	+ -		11	1	н	H	6.5
24 I 2 I 10 I 2 I I I I I I I I I I I I I I I I I	35-39	YEARS	2	· H		н		н			н	н	H	4.9
24 I 2 I 10 I 2 I I I I I I I I I I I I I I I I I				+	1	+-	0 0	+-	1	1			+ 1	
25 I I S I I I I I I I I I I I I I I I I			54	н	~	ы	10	—		ы	T I	н	-0 1	ή ,
25 I I S I I I I I I I I I I I I I I I I	55-05	YEARS		н		н .		н -			I		4 4	7.7
DLUTA 668 290 90 42 6			W	+ -	1	 - -	M	+ 1			н	н	H	PPT)
DLUM 868 290 90 42 6	45-49	YEARS	2	• н		L 1×4)	H		14	н	H	H	
2000				-	1 0	+	000	+	100	Α2	•	*	+	1332
4 A A A		3	200		000		24.76		4	9 60	HP (2.7		100.0

Source: Ontario Ministry of Health, Public Health Branch (for all tables on this page)

Exhibit 4.7

THERAPEUTIC ABORTIONS: GESTATION PERIOD BY AGE HAMILTON-WENTWORTH, 1987

						Α ε	g e					
											45-49 YEARS	
		+		-+-	1	·	T 2	+ I				4
5	I	ī		Î		ī	ī	I	1		I I	.3
6	Ĭ	I	4	I	5	I 6	I 5	I	1	1. 1.	I I	21
7	I	I I	11	I	25	I 19	I 6	I	7		I I	68 5.1
8	I	I I	40	I	59	1 41 1	I 26	I	13	5	i i	13.8
9	I	I T	51	I	93	I 58	I 34	I	17	I 4	1 2 1	259 19.4
10	I	I	63	I	86	I 58	I 29	I	13	1 1	1 1 1	251
	I a	+ ! I	38	I	61	1 47 I	I 20	I	7	I 2	I 1	177
	i i	I	42	I	46	I 25	I 16	1	4	1 1	i i	135
13	I I	I	21	I	30	I 12	I 6	1	3	1 1	I I	74 5.6
14	I I	I	22	I	21	I 10	I 7	1	1	I	I I	62 4.7
	I	I	8	I	8	I 5	I 3	1		I	I I	24
16	I	I	2	I	4	I 6	1 1	. 1		I	I 3	1.0
17	I a	l I	9	I	13	I 2	I	1		I I	I I	2.0
	I	I	8	I	6	I 3	I E	1		I I	I I	1.4
19	I I	I	3	I	6	I 1 I	I 1 I	1		I I	I I	. 9
20	I	I			1	I		1		_	_	2.
21	I			4		A	I			1	I I	.1
COLUMN	.6	3	323		465 34.9	295 22.1	158		65 4.9	15 1.1	3 .2	1332 100.0

Source: Ontario Ministry of Health, Public Health Branch

Contact: Jane Underwood, Director of Nursing, Hamilton-Wentworth Dep't of Health Services

Dr. R. Khazen, Chief, Family Health, Public Health Resource Service, Ministry of Health

Community Health Protection

- immunization - dental health - road trauma - occupational in jury

Chapter 5

HAMILTON-WENTWORTH SCHOOL IMMUNIZATION STATUS SUMMARY 1987-88

School Populations (includes JK - Gr. 13) Elementary Secondary

TOTAL

51,814 26,426 78,778

I) PERCENT OF TOTAL SCHOOL ENROLLMENT ASSESSED BY HEALTH DEPARTMENT

Elementary Pupils:

Birth Year	Grade	No. of Pupils on S.H.S.	No. of Pupils with Complete Immunization	Percent of Pupils on S.H.S. with Complete Immunization
83	JK	4,227	3,859	91.3
82	SK	5,400	4,999	92.6
81	1	5,504	4,808	87.4
80	2	5,361	4,326	80.7
79	3	5,257	4,622	87.9
78	4	5,197	4,671	89.9
77	5	5,104	4,597	90.1
76	6	5,266	4,703	89.3
75	7	5,162	4,480	86.8
74	8	5,230_	4,412	84.4
		51,708	45,477	

- have assessed records for 99.8% of elementary pupils in region
- 87.9% of elementary pupils assessed have complete immunization
- have records of complete immunization for 87.8% of all elementary pupils in region.

Secondary Pupils:

Birth Year	Grade	No. of Pupils on S.H.S.	No. of Pupils with Complete Immunization	Percent of Pupils on S.H.S. with Complete Immunization
73	9	5,231	4,290	82.0
72	10	5,445	4,222	77.5
71	11	5,058	3,110	61.5
70	12	1,916	790	41.2
69	13	964	388	40.2
		18,614	12,800	

- have assessed records for 70.4% of secondary pupils in region
- 68.8% of secondary pupils assessed have complete immunization
- have records of complete immunization for 48.4% of all secondary pupils in region.

Elementary and Secondary Pupils:

- have assessed records for 70,322 or 89.3% of elementary and secondary pupils in region
- 58,277 or 82.9% of pupils assessed have complete immunization
- have records of complete immunization for 74% of total school population in region.

II) NUMBER OF PUPILS FULLY IMMUNIZED BY DISEASE

Elementary Pupils:

Birth Year	Grade	Diptheria Tetanus	Polio	Measles	Rubella	Mumps
83	JK	3962	3966	4005	3992	3989
82	SK	5160	5163	5135	5123	5124
81	1	4977	4980	5237	5220	5227
80	2	4426	4438	5152	5143	5142
79	3	4736	4749	5062	5051	5051
78	4	4784	4792	5011	4996	4992
77	5	4737	4745	4880	4864	4863
76	6	4858	4858	5035	5031	5024
75	7	4721	4733	4756	4738	4731
74	8	4765	4784	4724	4699	4657
		47126	47208	48997	48857	48800
Seconda	ry Pupils:					
73	9	4696	4714	4741	4713	4669
72	10	4815	4843	4820	4777	4671
71	11	4130	4187	3866	3774	3668
70 ·	12	1414	1456	1230	1153	1088
69	13	808	841	540	503	478
		15863	16041	15197	14920	14574

Percent of Elementary Pupils Immunized by Disease:

Diptheria Tetanus	1	90.95%			
Polio		91.1%	44.4.2.2		
Measles		94.6%	(total elementary population	=	51,814)
Rubella		94.3%			
Mumps		94.2%			

Percent of Secondary Pupils Fully Immunized by Disease:

Diptheria Tetanus)	60%	
Polio		60.7%	
Measles		57.5%	(total secondary population = 26,426)
Rubella		56.5%	
Mumps		55.2%	

Percent of Elementary & Secondary Pupils Fully Immunized by Disease:

Diptheria Tetanus]	79.9%	
Polio		80.3%	
Measles		81.5%	(total school population = 78,778)
Rubella		80.9%	
Mumps		80.4%	

EXEMPTIONS
MITH
PUPILS
OF.
NUMBER
(III)

Religious	50	7	14	12	m	Ŋ	pro-	7	ហ	00	7	-	9	ı	- gran		82
Medical	1	m	2	m	2	47	e	1	2	m	2	7	2	2	•	1	39
Grade	**	XX.	-	2	m	4	S	9	7	œ	6	10	11	12	13		
Birth Year	83	82	∞ —	80	79	78	77	76	75	74	73	72	71	70	69		

Percent of Pupils with Exemptions:

.05%	op.
Medical	Religious/Conscience

SUSPENSIONS & EXCLUSIONS 2

Total number of orders written

(C.A.S.H. database) [for all school immunization Department of Health Services, Nursing Division Regional Municipality of Hamilton-Wentworth, data Source:

Contact: Jane Underwood, Director of Nursing, D.H.S.

Exhibit 5.2

DONE	1985		
MDIVIDU	AMD		
PER I	1982		
LEETH	TO 13,		
2	AGES 5		
HIRBING AND	ONTARIO,		
	AND		
AVERAGE DENTAL DECAY	WENTWORTH		
AGE DEN	HAMILTON-WE		
AVER	IN HA		

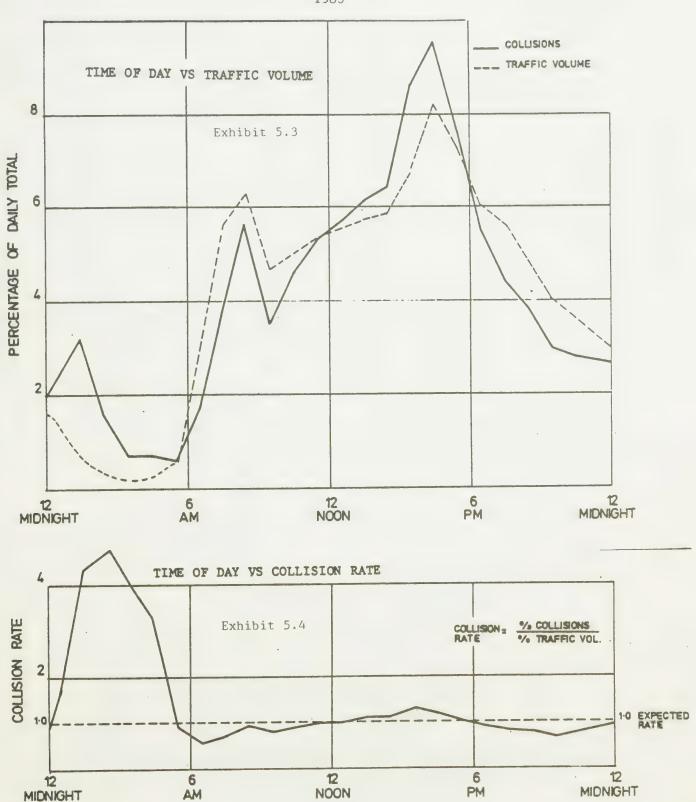
110 1985	1.20	2.37	3.19	1.57	2.51
Onta 1982		3.23	4.51	2.11	3.24
Wentworth 1985	1.37	2.70			2.41
Hamilton- 1982		2.95	9.	Ξ.	2
(years)	S	7	6	11	13

Hamilton-Wentworth Regional Health Unit, 1985 Dental Health Indices 1985/86 Survey Ministry of Health Public Health Branch Source:

Figures based on "random" sample of schools in the municipality (some socio-economic bias is to be expected). Editor's notes:

Note that the city's new Director of Dental Services is Gary Jackson.

ROAD TRAUMA STATISTICS - HAMILTON-WENTWORTH 1985



Note: In the same report (cited below) it is stated that 42% of the collisions which occurred during the period from 10:00 pm to 3:00 am Wednesdays to Sundays, involved alcohol (p.45).

Source: City of Hamilton Traffic Department. 1986. 1985 Hamilton-Wentworth Collision Report.

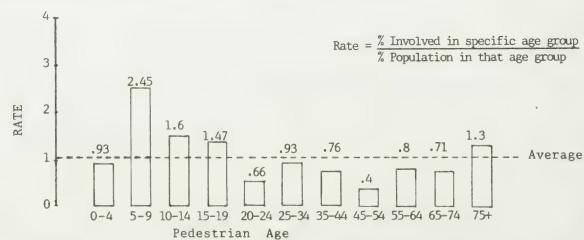
-	_	
-	_	
-	_	
-	_	
-	_	

Exhibit 5.5

		8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8						
			COLL	COLLISIONS B	BY MUNICIPALITY	TI		
Municipality	lity	Fatal		Non-fatal Injury	Damage Only		All	Rate per 1000 Pop.
Ancaster	5.4		1	19	116		196	11.8
Dundas			-	66	152		252	12.
Flamborough	yangh		m	111	185		299	11.
Glanbrook)k		=	41	62		104	11.0
city of	Hamilton	-	14	2541	3315		5870	19.
Stoney C	Creek		7	282	342		625	14.
TOTAL for Regional Pality	or H-W al Munici	i	21	3153	4172		7346	17.
			1	INJURY STATUS	TUS BY C	ATEGORY	Exhibi	bit 5.
Category	H	Persons Involved	Injured or Kille	70	Injuries/ Involved	T Y Fatal	p e o f Major	i n j Minor
Driver	12,	, 769	2,4	463	0.19	13	101	814
Bicyclist	a t	243		239	86.0	2	17	66
Rider/ Passenger	7	, 983	1,	1,417	0.18	60	6.5	458
Pedestrian	lan	410		410	1.00	٣	65	205
TOTALS	21	21,405	4	, 529	0.21	26	248 1	,576
Note: 0	Collision	n types:						
MIN	HINIMAL:	Person	414	not go	to a hospital	al for	r medical	treatment
*	MINOR:	Person (scene 30 to ?	hospital for	med	medical tre	treatment
A.	MAJOR:	Person a	admi	admitted to in the accid	to hospital	for	treatment	int of

ent upon but was injuries

1,535 121



Source: City of Hamilton Traffic Department, 1985 Hamilton-Wentworth Collision Report

Exhibit 5.8

WORKER'S COMPENSATION BOARD OF ONTARIO COMPENSATION CLAIMS INITIALLY SETTLED IN 1987: NUMBER OF FATAL & NON-FATAL CLAIMS AND WORKING DAYS LOST BY OCCUPATION FOR ALL INDUSTRIES, HAMILTON*

		2	NUMBER OF CLAIMS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DAYS OF TEI	OF TEMPORARY COMPENSATION
000	OCCUPATION	FATALS	NON-FATALS	TOTAL	DAYS	AVERAGE
		(0	a r	29, 573	37
8	OCCUPATION NOT STATED		2 -)	18	17
- 7	MANAGERIAL, ADMINISTRATIVE AND RELATED OCCUPATIONS	0 0	27	හ ග	666	18
200		0	23	23	229	0
3 10		0	-	-	m	က
2 7	HINDURALIONS IN RELIGIONS	C	84	84	1,416	17
7 7	DOCUMENTAL AND RELATED OCCUPATIONS OCCUPATIONS TO MEDITAL AND HEALTH	0	427	427	13,514	32
5	ACCUPATIONS IN MEDICINE AND REALTH	0	17	17	069	32
50	ARIJOILO, LIICRARI, RECREATIONE AND REPAIR COCC.	C	411	411	9,889	24
4 1	CLEKICAL AND RELAIED OCCUPATIONS	0 0	212	212	5,391	26
בה	SALES UCCUPALIONS	0	926	956	33,763	36
0 1	SERVICE OCCUPATIONS FASTATION CONTINUE AND ANIMAL MISSIANDRY OCCUPA	C	33	ල	1,444	44
	PARAING, HORITCHIORAL AND ANIMAL HOSDANDAL COCCIA	0	2	CA	202	101
0 1	FUKESIKI AND LUGGING OCCUPATIONS	0) O	თ	1,093	121
11	277 - 245) C	655	6538	30,865	47
00 0	PROCESSING UCCUPALIONS	0 0	838	83.08	25,847	31
00 (MACHINING AND RECALD COCCUPALIONS	- (1 128	1, 129	41,140	37
00 I	AND REPAIRING	- 0	282	9000	25,276	42
00	CONSTRUCTION TRADES COCCEPTIONS	C	561	561	22,673	41
9	TANDER EQUIPMENT OFFIRE ING OCCUPATIONS N F C	0 0	20.03	553	21,997	40
00 0	SALEXIALS MANULING AND KELAIED OCCUPATIONS, NICESCO.) C	26	16	2,352	25
0 0 0	OCCUPATIONS, NOT ELSEWHERE CLASSIFIED	00	647	647	25,008	38
TOTAL	AL	n	8,135	8,138	293,446	36

* Refer to explanatory note on the following page

Source: Worker's Compensation Board of Ontario (Toronto), Report S57102K2

AN EXPLANATORY NOTE ON INITIALLY SETTLED COMPENSATION CLAIMS

The report(s) enclosed are tabulated on the basis of "Compensation Claims Initially Settled in the year 19XX". This tabulation basis selects claims satisfying two criteria:

1. Claim status is "compensation"

2. Claim was "initially settled" in 19XX

1. COMPENSATION CLAIMS

These are claims involving "disabling" injuries/illnesses resulting in death, permanent disability or temporary disability. If the claim is allowed, the Board compensates the worker or his/her survivors according to the Ontario Workers' Compensation Act.

Less severe injuries which do not involve compensation for lost wages or other disability benefits are NOT included in the tabulations. These are mainly claims requiring health care only and there is no lost time beyond the day of the accident.

Compensation claims include those instances where the LATEST type of disability is reported as:

1. Fatal

2. Permanent Disability

3. Temporary Total Disability

4. Temporary Partial Disability

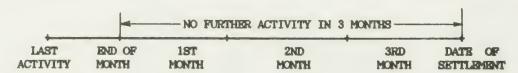
5. Temporary Partial Difference

6. Rehabilitation Only

INITIAL SETTLEMENT IN 19XX

This means that the claim was settled for the FIRST time in 19XX. As such, this criterion EXCLUDES those claims which had been settled for the first time in some PREVIOUS year but since has been re-opened and then resettled in 19XX. Re-opening of a claim is mainly due to recurrence of a disability after having returned to work, increase in the degree of permanent disability, death, etc. It should be noted that a new claim is set up for a new injury.

Claims are considered settled when there is no further activity anticipated. Technically, this means that there has been no action taken on the claim during the three months following the month of the last activity. Usually, the last activity is the last compensation payment in the case of a temporary disability, or the setting up of a monthly pension and/or lump sum payment in the case of a fatality or permanent disability. The following diagram illustrates this rule:



Please note that the figures are tabulated on the basis of "Initially Settled Compensation Claims"; an explanatory note is enclosed to clarify the definition. Essentially, this means that re-opened claims and "Health-care-only" (no-lost-time) claims are excluded. Furthermore, lost time are accumulated only up to initial settlement. Days lost attributable to subsequent resettlements are not reflected in these tables. It should also be noted that time lost is given as the number of working days on Temporary Total compensation. Time lost as a result of death and/or permanent disability are not imputed.

Personal and Social Development

- mental health - lifestyle - substance abuse

Chapter 6

Exhibit 6.1

ADMISSIONS TO PSYCHIATRIC UNITS BY HOSPITAL, AGE AND SEX Hamilton-Wentworth Region April 1 1986 - March 31 1987

		S S	Chedoke-McMaster Hospitals	ster	# 95	Hamilton Civic General Hospita	n Civic Hospital	Î	Hemilton Civic Henderson Hospital	Civíc Hospital		St. Joseph's Kospital	ph's at	E	nilton Psyc Hospital	Hamilton Psychiatric Hospital
₩	Total No. X of uni (all units) # Male # Female Total	# Male	# Female	% of unit Total	# Male # Female		% of unit Total	# Male	# Male # Female	% of unit Total	# Male	Male # Female	% of unit Total	# Rale	Male #Female	% of unit Total
0-14	10	0	-	0.29	0	0	00.00	0	0	00.00	м	9	2.01	0	0	00.00
15-24	907	35	34	20.12	16	7	13.37	7	ın	76.7	77	29	24.78	127	79	18.82
25-34	979	31	28	17.20	17	17	19.77	17	28	18.52	63	76	31.03	265	104	36.35
35-44	396	23	97	20.12	13	15	16.28	18	21	16.05	56	97	16.07	106	82	18.52
72-27	292	œ	28	10.49	16	80	19.77	16	32	19.75	14	56	8.93	89	99	13.20
55-64	240	1	33	12.83	14	17	18.02	20	23	17.70	12	20	7.14	35	55	8.87
65+	231	23	42	18.95	10	12	12.79	12	77	23.04	21	54	10.04	20	23	4.24
TOTAL	2221	131 212		100.00	88	88	100.00	06	153	100.00	183	265	100.00	621	394	100.00

Note: Total % indicates the percentage of patients per age category admitted to each hospital

Compiled from: Ontario Ministry of Health, Information and Systems Division, Information Resources and Services Branch, Mental Health Statistics,

Table ADM07

Exhibit 6.2

DISCHARGES BY DIAGNOSIS

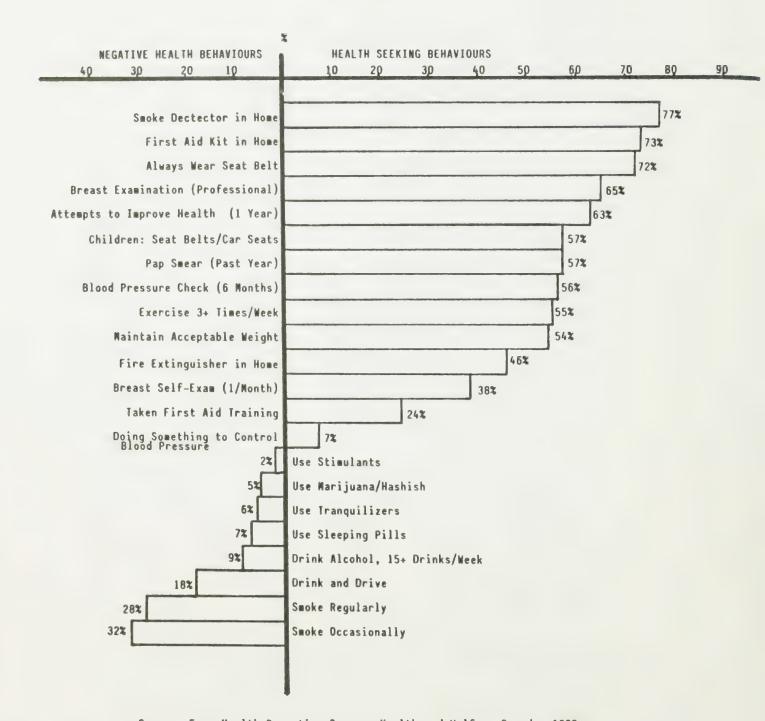
Hamilton Psychiatric Hospital

	1	1979			1986	
Diagnosis (ICD9) #	Male #	Female	Total %	# Male #	Female	Total %
291 Alcoholic Psychoses	10	5	1.81	5	2	0.77
292 Drug Psychoses	3	4	0.85	12	0	1.31
293/294 Other Organic Psychoses	7	8	1.81	5	5	1.09
295 Schizophrenia	242	107	42.20	262	155	45.57
296 Affective Disorders	55	54	13.18	67	56	13.44
297 Paranoid States	7	4	1.33	7	9	1.75
298/299 Other Non-Organic Psychoses	22	9	3.75	11	17	3.06
Total With Psychoses	346	191	64.93	369	244	66.99
300 Neurotic Disorders	23	51	8.95	16	29	4.92
301 Personality Disorders	74	58	15.96	66	43	11.91
303 Alcoholism	8	2	1.21	15	6	2.30
304/305 Drug Dependence/	8	2	1.21	15	4	2.08
308 Acute Reaction to	6	3	1.09	12	14	2.84
309 Adjustment Reaction	11	4	1.81	17	15	3.50
313 Emotional Disturbance Childhood/Adolescence	0	2	0.25	0	0	0.00
302/306/307/310/311/312	19	5	2.90	11	2	1.42
/316 Non-Psychotic Disorders 317/318/319 Retardation	8	6	1.69	25	12	4.04
Total Without Psychoses	157	133	35.07	177	125	33.01
GRAND TOTAL	503	324	100.00	546	369	100.00

Source: Hamilton Psychiatric Hospital, Psychiatry, Dr.s Gary Miller & Barry Humphrey

Exhibit 6.3

PERCENTAGE OF ONTARIO RESIDENTS PRACTISING POSITIVE AND NEGATIVE HEALTH BEHAVIOURS, 1985



Source: From Health Promotion Survey, Health and Welfare Canada, 1985.

Reprinted in Spasoff, R.A. et al. 1987. Health for all Ontario: Report of the Panel on Health Goals for Ontario. Ontario Ministry of Health.

[Exhibit 11, p.28]

TYPES OF PROBLEM SUBSTANCES* AND AGENCY Exhibit 6.4

NITRATES

TRAND. n(%)

M. TRAND.

TOBACCO (%) U

> STIM. n(%)

STIM. n(8)

SOLVENT D (90) CI

MARC. n(%)

NARC. n(%)

HALLUC. n(%)

CANNABIS COCAINE

n(%)

BARB. 1(8)

DEP. ANTI-(%)

ALCOHOL

AGENCY CLIENTS n(%)

n(%)

n(%)

n(8)

VOLATILE

ΣĮ

			(0)11	(0): (0): (0):	10 111											
ADAS	99	53(80.3) 0(0)	000	(0)0	(0)0	25(37.9) 11(16.7)	11(16.7)	(0)0	(0)0	7(10.6) 0(0)	(0)0	(0)0 (0)0	(0)0	5(7.6) 0(0)	(0)0	1(1.5)
AX	47	30(63.8) 6(0)	0(0)	(0)0	(0)0	25(53.2) 13(27.7)		10(21.3) 1(2.1)	1(2.1)	(0)0	1(2.1)	3(6.4) 0(0)	(0)0	0(0)0	(0)0	0(0)
BPL	47	45(95.8)		1(2.1) 1(2.1) 0(0)	(0)0	8(17.0) 4(8.5)	4(8.5)	1(2.1)	(0)0	3(6.4) 1(2.1)	1(2.1)	1(2.1) 2(4.3)	6(12.8) 0(0)		(0)0	0(0)
HEW	53	49(92.4)	3(5.7)	4(7.6)	5(9.4)	49(92.4) 3(5.7) 4(7.6) 5(9.4) 18(34.0) 12(22.6)	12(22.6)	8(15.1)	8(15.1) 7(13.2) 12(22.6)3(5.7)	12(22.6)		6(11.3) \$(9.4)	(17.0)	9(17.0)14(26.4) 7(13.2) 0(0)	7(13.2)	(0)0
WAY	38	38(100.0)	0(0)	0(0)	(0)0	(0)0	(0)0	0(0)	(0)0	0(0)	1(2.6)	1(2.6) 0(0) 0(0)	(0)0	0 (0)0	(0)0	1(2.6)
TOTAL 247 SAMPLE	247	212(85.8)		5(2.0)	5(2.0)	4(1.6) 5(2.0) 5(2.0) 76(30.8) 39(15.8)		(7.7)61	8(3.2) 2	22(8.9)	6(2.4)	8(3.2) 22(8.9) 6(2.4) 10(4.1) 7(2.8)	(6.1)	15(6.1) 19(7.7) 7(2.8)	(2.8)	2(0.8)

*indicates that both client and counsellor attribute substance(s) to client's seeking assistance.

Study totals have been adjusted to prevent double-counting of individuals who attended more than one agency.

The 247 person sample includes all those who, between July 1 and Dec. 31, 1987, presented to at least one of the five agencies and remained involved long enough that a treatment plan was developed and initiated by the client. Note:

medical use, i.e. prescribed or recommended by a physician non-medical, i.e. obtained from non-professional sources ("on the street") Ξ

N-M

AGENCY LEGEND

ADAS- Alcohol and Drug Assessment Services, assessment/referral AY- Alternatives for Youth, outpatient counselling

MEL- Mary Ellis House, long term residential BPL- Bold Park Lodge, long term residential

Wayside House, long term residential MAY- Client-Centred Community Needs Assessment in Hamilton-Wentworth 1987, Hamilton: Addiction Research Foundation. Mike Devillaer. July 1988. SOURCE:



Appendix I

Cautions in interpreting data

Appendix I: Cautions in Interpreting Data in the Fact Book

At present there are three types of data which comprise the Fact Book: mortality/Morbidity data; utilization rates under treatment and social indicators. Each data type has differing advantages and disadvantages which influence their appropriateness and quality. Other types of data, and their advantages and disadvantages are outlined by Chambers et.al. (1983). A summary of the advantages and disadvantages of the data types used in the Fact Book are as follows.

A.1 <u>Mortality/Morbidity</u> (e.g. disease-specific mortality, hospital discharges by diagnosis)

Advantages

- Readily available and inexpensive access;
- 2. Easily communicated to health professionals;
- Trends in measures often straightforward;
- 4. Usually amenable to mathematical index (rate) construction;
- 5. Allows comparison of local area with other jurisdictions;
- Data for several years avoids basing planning on data of an aberrant year;
- 7. Can be used to monitor effects of intervention.

Disadvantages

- Residence classification unreliable (e.g. location of death may not be place where individual lived most of life);
- Problems of repeatability in assigning codes (e.g. ICDA diagnostic codes);
- Iack of continuity in trends and changes in coding rules resulting from revisions of ICDA;
- 4. Variations in medical terminology;
- 5. Differences in thoroughness in completing medical cause of death certification and morbid events in hospitals and communities;
- 6. Difficulties in establishing the correct cause of death and diagnoses;
- 7. May be outdated;
- Often incidence not prevalence or vice versa, e.g., psychiatric admissions;
- 9. Overlapping jurisdictions.

A.2 <u>Utilization/Rates Under Treatment</u> (e.g. therapeutic abortions, nutrition counselling per patient in diabetic day care)

Advantages

- Availability and low cost;
- Usually reliable if financial incentive to complete forms and/ or to report performance;
- Can be used to compare utilization across facilities, regions and time;
- 4. Can be used to monitor effects of intervention(s).

Disadvantages

- May be inaccessible or poorly reported (under reporting is common);
- Coding may vary from center to center, making comparison difficult;
- May be "overestimates" of illness (psuedo-morbidity);
- 4. May be outdated;
- May be inaccurate because of overlapping jurisdictions for reporting;
- 6. May be under-reporting of stigmatizing disorders (e.g. VD).
- A.3 Social Indicators (e.g. income levels of families, worker's compensation)

Advantages

- Readily available and inexpensive to assess;
- Can be used to monitor the effects of intervention.

Disadvantages

- May be grossly outdated, as most data are collected at 10 year intervals (the census) (1951, '61, '71, '81);
- Measures like age, sex, or date of birth are often inaccurate.
 Frequently inaccurate and complex measures include income, education and employment;
- Often only incidence (new characteristics/problems of persons at a given point in time) and not prevalence (total number of persons with characteristics/problems at a given point in time); or prevalence not incidence;
- 4. Relationships between health and social indicators are often tenuous;
- 5. Comparisons across jurisdictions often impossible because of over-lapping jurisdictions or lack of comparable data about each jurisdiction.



Appendix II Additional and forthcoming resources

APPENDIX II ADDITIONAL AND FORTHCOMING RESOURCES

A brief annotated bibliography of health-related research programs whose results are due to be released in the next few months is provided below. A few datasets for which information could not be collected in time for inclusion in this edition of the Fact Book have also been included below.

I.

Project title: North Hamilton Community Health Survey

Principal investigator(s): Dr. J. Feightner Dr. J.J. Rice

Organization(s): North Hamilton Community Health Centre
McMaster Faculty of Health Sciences

Anticipated release date: Fall of 1988

Synopsis: Survey of over 500 randomly selected households using a standardized questionnaire containing 122 questions, providing data in eight areas: respondent profile, self-perceived health status, psychological well-being, burden of illness, lifestyle and health issues, health maintenance and prevention, health care utilization, and social networks. This work focussed on the North End of Hamilton [pop. aprox 5,812 (1981 census)], and was conducted during the summer of 1986 on behalf of the North Hamilton Community Health Centre.

II.

Project title: Services for Seniors Study

Principal investigator(s): Elsie German

Organization(s): Hamilton-Wentworth District Health Council

Regional Municipality of Hamilton-Wentworth

Anticipated release date: Fall of 1988

Synopsis: The Services for Senior

The Services for Seniors study was a 2.5 year investigation of the use of existing health and social service programs for the elderly in the Region. It has attempted to determine the appropriateness of existing service and accommodation availability, the extent of overlap in service provision, and the possible existence

of gaps in the continuum of care for the elderly. The study has comprised three surveys: a bed accommodation and waiting list survey, an agencies and government representatives as key informants survey, and a senoir citizens as key informants survey. The study reports on the findings of these surveys as well as providing an historical perspective on the evolution of services for seniors in the Province and Region. Community support services, information dissemination, medical and psychiatric services, education, and housing are also considered.

III.

Project title: Report on Health Indicators in Ontario

Principal investigator(s): Lily Eastridge

Organization(s): Ontario Ministry of Health, Public Health

Branch

Anticipated release date: Fall/Winter 1988

IV.

Project title: Neighbourhood Smoking Survey

Principal investigator(s): Dr. Harry Shannon

Organization(s): Faculty of Health Sciences, McMaster University

(Clinical Epidemiology and Biostatistics)

Anticipated release date: material on the prevalence of

smoking by age group, gender and geography (c.1980) to be included in the next edition of the Fact

Book

V.

Project title: Statistical Report on Community Health

Principal investigator(s):

Organization(s): Ontario Ministry of Health, Community Health

Programs Branch

Anticipated release date: Winter/Spring 1989

Synopsis: Follow-up to the 1984 report in revised format

VI.

Project title: A Description of the Social Assistance System in

Hamilton-Wentworth

Principal investigator(s): Jane Opie, Gloria DeSantis

Social Planning and Research Council of Hamilton and District Organization(s):

Release date: August 1988

Description and holistic analysis of the local Synopsis:

social assistance network

Appendix III

The Health Priorities Analysis Unit Synopsis of activities and committee membership lists



THE HEALTH PRIORITIES ANALYSIS UNIT (H.P.A.U.)

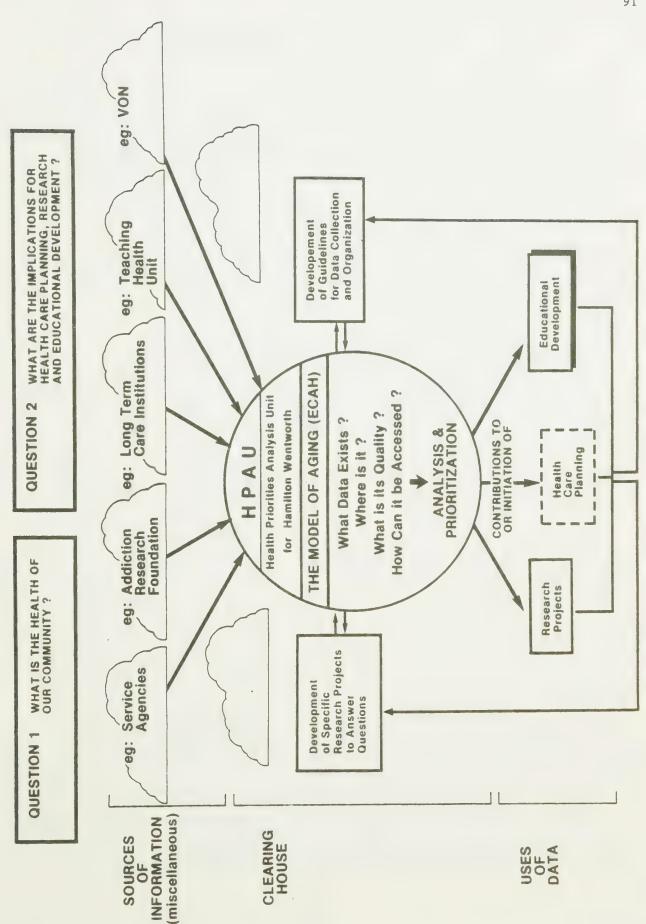
The H.P.A.U. is a health information unit in the Educational Centre for Aging and Health which is actively establishing working relationships with information sources in the Community, the University and Regional Government. Its role is to foster and promote advances in education and research in health and health care by encouraging the development of systems for improving access to and use of reliable information concerning health needs and trends in the community.

In pursuit of this goal the H.P.A.U. is developing strategies for:

- 1. Identification, generation and sharing of population based health related information including:
 - identification and registration of existing health information sources in full collaboration with those sources
 - encouraging sharing of population based information for purposes of improving education of health professionals, research and health planning
 - encouraging and facilitating acquisition of health information and, when indicated, assisting in the identification of expertise and guidance in the compilation of data.
- 2. Information management including:
 - encouraging and facilitating analysis and verification of existing or new data and prioritizing health needs based on data analysis
 - translating and displaying information in an understandable form to assist in education, research and health care planning
 - to maintain links among information sources and educational research and health care planners to foster and facilitate continuity of information availability and utilization to assure that these activities continue to be current, relevant and of high quality.

For further information contact: The Health Priorities Analysis Unit, McMaster University Medical Centre, Room 2J3, Hamilton, Ontario L8N 3Z5 tele: (416) 525-9140, ext. 2254

After April 30, 1988: 25 Main Street West, Hamilton, Ontario L8P 1H1



HEALTH PRIORITIES ANALYSIS UNIT SUMMARY OF 1988 ACTIVITIES

1. Fact Book on the health status of Hamilton-Wentworth residents

The HPAU is currently working with Health Department personnel to update the Fact Book on the Health Status of Citizens in the Regional Municipality of Hamilton-Wentworth. The fact book is a collection of available information on health status gleaned from routinely collected data and from special reports, much of which has not previously been widely disseminated.

The fact book will be made available to students, educators, researchers and community groups, and is expected to be a valuable resource in the identification of information sources and in facilitating communication and coordination of health-related activities in the region.

2. Inventory of local health-related datasets

In keeping with the educational mandate of the HPAU, we have undertaken to produce an inventory of local health-related datasets to facilitate the assessment of community needs, and contribute to the development of educational programs that address these needs. We hope to eventually develop an inventory of sufficient breadth and quality to assist in the prioritization of community needs for educational and resource planning. It is understood that this will require a quality and level of standardization amongst datasets (in geography and in key identifiers) that is not currently available.

Two survey questionaires were designed and edited as instruments to identify the number, type and quality of available community data sets. The first consisted of a preliminary one page questionnaire distributed in the fall of 1987. It was followed with a more detailed survey instrument mailed to 53 selected agencies and groups in the community. A further 18 of the 25 respondents were interviewed. The results of this pilot project have been collated and computerized for analysis. Our initial findings suggest that, given ambiguities in questionnaire wording and an emphasis on stracture rather than content, the current databas is not as practical as had been hoped.

We are currently developing a subject-based inventory using hierarchical keyword structures to provide agency listings along (user) selected topics. Keywords will be compiled from the data entry forms being currently solicited from selected community agencies. Under consideration is a 3 or 5-point scale denoting the degree to which the agency 'focuses' on the selected topic (almost exclusively or primarily versus a few or one field in the database). "Users" of this inventory would be urged to contact the identified agency(ies) directly, avoiding concerns regarding confidentiality which would arise if HPAU was a direct data distributor.

3. PaRCIL

Under the aegis of the Regional Municipality, a major incentive to integrate and computerize geographically-referenced planning and socio-demographic data has been undertaken using geographic information systems. The HPAU has undertaken to assist in exploring the potential integration of the health sector into this project. This will involve a co-ordinated standardization of health data with respect to quality, geography (scale, boundaries), and key identifiers. Initial HPAU involvements in this context have thus far been limited to the regional Department of Health Services.

4. Pilot projects

It is our hope that specific joint cooperative projects will provide the opportunity to cement and animate otherwise formal or "paper" ties between the HPAU and community organizations. Some initiatives have been proposed and/or begun with agencies who sit on our Community Advisory Board and others will be sought. As of June 1988, some of these projects are as follows:

(a) Joint HPAU/SPRC GIS pilot project

Exploring the potential for the application of geographic information systems (GIS) to the routine mapping and analysis of socio-economic and of health and service utilization by neighbourhood within the Hamilton-Wentworth area. A pilot study using three variables from the 1981 census and rudimentary GIS software will determine the adviseability of applying this technology to a larger database that the Social Planning and Research Council (SPRC) is acquiring for the production of its censal neighbourhood data catalogue.

(b) Joint HPAU/ARF educational pilot project

Working in cooperation with the Addiction Research Foundation (Hamilton office) to develop an educational module for the McMaster MD and nursing programs tailored specifically to the identification, treatment and wider context of alcoholism. Local data will be used to supplement the literature in outlining the need for a focus on alcohol abuse as a major health problem in North American society, and in the Hamilton-Wentworth region.

(c) HPAU community topic-based inventory pilot project

Solociting questions of concern from local agencies in community health to guide the development of a topic-based inventory of information sources responsive to community needs.

(d) Joint HPAU/PCS community needs prioritization

Exploring joint cooperation with the Placement Coordination Service in the identification of specific priority issues in the community, such as hearing loss or substance abuse among the elderly, to facilitate research and planning on these issues.

5. Established Populations for Epidemiological Studies of the Elderly (EPESE)

The HPAU is working with colleagues at McMaster and the University of Guelph, as well as a number of community participants, on a proposal for a feasibility study in preparation for a larger longitudinal study of the health and social needs of, and predictors of health service utilization among, seniors in the Hamilton-Wentworth region. Emphasis will be placed on nutrition and muskulo-skeletal issues. The study will be undertaken in collaboration with four centres in the United States and in cooperation with the National Institute on Aging.

May, 1988

HEALTH PRIORITIES ANALYSIS UNIT, 25 MAIN STREET WEST, 2nd FLOOR

COMMUNITY ADVISORY BOARD MEMBERSHIP LIST

Dr. Kursch Ahmed, Systems Manager, Computation Services Unit, MUMC, HSC-2D5 525-9140 Extension 2676

Ms. Molly Anderson, Executive Director, VON of Hamilton-Wentworth, 414 Victoria Avenue North, Hamilton, Ont. L&L 5G8 529-0700

Ms. Joyce Caygill, Director, Placement Coordination Service, VON of Hamilton-Wentworth, 414 Victoria Avenue North, Hamilton, Ont. L&L 5G8 528-1512

Dr. Larry Chambers, Professor, Clinical Epidemiology and Biostatistics, Epidemiology Consultant, Department of Health Services, Regional Municipality of Hamilton-Wentworth, 25 Main Street West, 4th Floor, P.O. Box 897, Hamilton, Ontario L8N 3P6 521-4807

Ms. Gloria DeSantis, Research Director, Social Planning and Research Council of Hamilton & District, 155 James Street South, Suite 602, Hamilton, Ont. L8P 3A4 522-1148

Mr. Mike DeVillaer, Consultant, Addiction Research Foundation, 20 Hughson Street South, Suite 508, Hamilton, Ont. L8N 2A1 525-1250

Mr. John Gartner,
Director of Regional Planning,
Regional Municipality of Hamilton-Wentworth,
119 King Street West, P.O. Box 910,
Hamilton Ont. L8N 3V9
526-4210

Dr. Barry Humphrey,
Chairperson, Psychiatric Network Management
Information System for Hamilton-Wentworth,
Chief of Staff, Hamilton Psychiatric Hospital,
West 5th & Fennell Avenue, Box 585,
Hamilton, Ont. L8N 3K7
388-2511 Extension 252

Ms. Anne Kennedy,
Public Health Nutritionist,
Department of Health Services,
Regional Municipality of Hamilton-Wentworth,
25 Main Street West, P.O. Box 897,
Hamilton, Ont. L8N 3P6
521-4806

Ms. Gail MacKean, Assistant Executive Director, Hamilton-Wentworth District Health Council, P.O. Box 2085, Station A, M.P.O., Hamilton, Ont. L8N 3R5 389-1321

Mrs. Susan McClellan, Assistant to the Executive Director, St. Peter's Hospital, 88 Maplewood Street, Hamilton, Ont. L8M 1W9 549-6525 Extension 344

Mr. Sam Miller, Vice-President of Communications & Information Systems, Chedoke-McMaster Hospitals, MUMC, HSC-2E33 525-9140 Extension 5388

Dr. Richard Pickering, Interim Director, Health Priorities Analysis Unit, 25 Main Street West, 2nd Floor, P.O. Box 897, Hamilton, Ont. L8N 3P6 572-7970 (MUMC: 525-9140 ext. 2159)

Mr. Blake Poland, Research Assistant, Health Priorites Analysis Unit, 25 Main Street West, 2nd Floor, P.O. Box 897, Hamilton, Ont. L8N 3P6 572-7970

Dr. Walter Rosser, Chairperson, Department of Family Medicine, MUMC, HSC-2V5 525-9140 Extension 6195

Mr. Michael Schuster, Commissioner of Social Services, Regional Municipality of Hamilton-Wentworth, 119 King Street West, 15th Floor, P.O. Box 910, Hamilton, Ont. L8N 3V9 526-4380

Dr. Irene Turpie, Geriatric Evaluation Unit, St. Joseph's Hospital, 50 Charlton Avenue East, Hamilton, Ont. L&N 4A6 522-4941 Extension 6048

Mr. Mike Cillis, Ministry of Community and Social Services, 119 King St. W., Box 2112 Hamilton, Ont. L&N 329 521-7665

H.P.A.U.

EDUCATION, RESEARCH AND PLANNING ADVISORY GROUP

MEMBERSHIP LIST

Dr. K. Ahmed	Computation Services
Dr. R. Bloch	M.D. Undergraduate Programme
Ms. P. Caulfield	Nursing Education Programme and Clinical Teaching Unit
Dr. L. Chambers	Professor, Clinical Epidemiology and Biostatistics Epidemiology Consultant, Hamilton- Wentworth Department of Health Services
Mr. T. Flemming	Health Sciences Library
Dr. E. Lindsay	Continuing Health Science Education
Dr. J. Lomas	<pre>C.H.E.P.A. (Centre for Health Economics and Policy Analysis)</pre>
Dr. H. Munroe-Blum	Clinical Epidemiology & Biostatistics Psychiatry Data Base
Dr. V. Neufeld	Associate Dean for Education
Dr. R. Pickering	Interim Director, HPAU
Mr. B. Poland	Research Assistant, HPAU
Dr. W. Rosser	Chairman, Family Medicine
Ms. W. Torresin	OT/PT Programme
Dr. P. Tugwell	Chairman, Clinical Epidemiology & Biostatistics
Dr. S. Walter	Graduate Programme DME/M.HSc.
Mr. J. Wilson	Ministry of Community & Social Services



Appendix IV

- Fact Book user questionnaire



113

APPENDIX IV

FACT BOOK USER QUESTIONNAIRE

1.	How would you describe yourself? Student Educator Community agency Library Government agency Other (please specify:)
2.	Have you made specific use of the Fact Book for: (please elaborate)
	(a) education
	(b) service
	(c) research
3.	Did the Fact Book alter your approach to or thinking on an issue? If so, how? (Or if not, why not?)
4.	What is your overall impression of the Fact Book with respect to each type of use identified below:
	Education: poor 1 2 3 4 5 very favourable Service: poor 1 2 3 4 5 very favourable Research: poor 1 2 3 4 5 very favourable
5.	Please rate the sections of the Fact Book according to how helpful they were $\underline{to\ you}$ in each type of use, as identified below, (where $1=$ not very helpful and $5=$ very helpful, and NA = not consulted).
	Education Service Research
	Introduction
	Introduction Socio-demographic
	Introduction Socio-demographic Health status
	Introduction Socio-demographic Health status Preventive PHC
	Introduction Socio-demographic Health status

[Inquiries welcome: 572-7970]

6.	HOW	Mon	ld	yo	u e	e v a	lu	at	e 1	he	m	e t	ri	ial	i	n	t	h e		a	ct	8	00	k?	
		awk	маг	d.	c	nf	us	in	q	1	2	3	4	5		us	e	r -	fr	·i	e n	dl	У		
			orl																					d	
			001																						
7.	Ном	did	уо	u	fir	d	οu	t	abo	out	ti	n e	F	act	8	00	k	?							
				C	oll	e a	ġu	e																	
				C	our	3 6	ь	ib	lic	gr	apl	1 7													
				0	the	r:	_																		
8.	Your		mmc	ent	: \$	81	nd	3	ugg	ges	ti	on:	3	ге	ga	rd	i	n g		t h	е	c	on	ter	nt,
	pres	ent	ati	on	aı	br	0 1	98	ni	zat	io	n	o f	t	h e	f	a	: t	b	0	o k	ы	ou	ld	be
	most	ар	pre	ci	ate	d.																			
										Po salabi soon s															
							110	M	TO:		He	1 1	h	Pr	io	ri	*	i e	S	A	-	1 .	-		1 - 2
PLE	ASE D	ETA	CH	AN	N N	(E	UK	74																	
PLE	ASE D	ETA	CH	AN	D X		UK			;	25	Ma	ir	n S	tr	e e									001
PLE	ASE D	ETA	CH	AWI	א ט	E	UK			1	25 P. (M :	Bi		t r 89	e e 7	t	W	le:						





£ 677